

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Sims Group UK Limited

Rabone Lane

Smethwick

Warley

B66 2LF

**Variation application number**

EPR/ZP3691ET/V006

**Permit number**

EPR/ZP3691ET

# Rabone Lane

## Permit number EPR/ZP3691ET

### Introductory note

#### **This introductory note does not form a part of the notice**

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

This variation adds installation activities to the permit for the treatment of hazardous waste. This is due to a change in EWC code classification of small Mixed WEEE (Waste Electrical and Electronic Equipment) plastic casings. These can contain POPs (Persistent Organic Pollutants) and as result are deemed to be hazardous waste. This variation adds the following activities to the permit:

Section 5.3 A (1) a) (ii) - disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment and

Section 5.6 A (1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

It also adds the following waste codes to the permit: EWC 19 10 03\*, 19 10 05\*, 19 12 11\* 19 02 04\*, and 16 02 15\*.

Small Mixed WEEE (SMW) will be delivered to site from contracted suppliers and be subject to a pre acceptance and waste acceptance procedures. WEEE wastes will be stored and dealt with in accordance to relevant legislative requirements of the WEEE Regulations 2013 and Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities”.

SMW will be manually pre-treated on site to remove components that require removal prior to mechanical treatment. It will be treated as discrete batches of material. The equipment used / process route will be the same as for other waste streams.

Wastes from the process that are currently incapable of further viable treatment for metals recovery ('frag waste') will be transported from site for authorised disposal or further recovery.

In addition to the installation activities, the facility also operates a range of Waste Operations that include:

- Metal recycling.
- End of Life Vehicles (ELV) storage, depollution and dismantling.
- Storage of hazardous wastes in relation to waste operations.
- Metals washing

The Directly Associated Activities (DAAs) that are linked to the Installation include storage of the in-feed waste, pre-treatment/pre shredding in-feed waste, separation of fragmented waste and storage of the output from the shredder.

There are no changes to the annual throughput of waste that the facility is authorised to accept as a result of this variation. The maximum throughput allowed under the Installation activities and Waste Operations will remain as 374,999 tonnes per year and 74,999 tonnes per year respectively.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Waste disposal licence SL 1055 issued to Dunn Bros (metals) Limited	15/01/93	
Variation to application	01/11/96	
Variation to application	01/05/98	
Variation to application	07/11/08	
Administrative Variation application EPR/LP3091FK/V005	10/05/10	
Transfer application EPR/ZP3691ET/T001 (formerly administrative variation EPR/LP3091FK/V005)	Duly made 16/06/11	
Transfer determined EPR/ZP3691ET	12/07/11	Permit transferred from Dunn Brothers (1995) Limited to Sims Group UK Limited.
Application EPR/ZP3691ET/V002 (variation and consolidation)	Duly made 12/09/14	Application to vary and update the permit to IED conditions.
Variation determined EPR/ZP3691ET (Billing ref: ZP3032WF)	29/06/16	Varied and consolidated permit issued in modern condition format.
Application EPR/ZP3691ET/V003 (administrative variation)	Duly made 21/09/16	Variation application to add two new waste codes to table S2.1.
Variation determined EPR/ZP3691ET (PAS billing ref EP3736DW)	24/11/16	Varied permit issued.
Application EPR/ZP3691ET/V004 (variation and consolidation)	Duly made 12/03/18	Application to add waste EWC code 20 01 35* to Table S2.2, allow the acceptance and treatment of Small Mixed WEEE and to replace previous operating techniques and working plans associated with the permit with the operating techniques submitted with the application.
Additional information	15/05/18	Email containing the amended operating techniques documents.
Additional information	16/05/18	Email containing document on site's waste pre-acceptance, acceptance and rejection procedures.
Additional information	25/05/18	Operator's response to draft variation notice containing additional information on hazardous waste storage and dust suppression procedures.
Additional information	01/06/18	Emails that contain information on ELV handling procedure and updated copy of the operating techniques document.
Variation determined EPR/ZP3691ET Billing reference: TP3931JK	05/06/18	Varied permit issued.
Application EPR/ZP3691ET/V005 (variation and consolidation)	Duly Made 27/01/23	Application to add waste EWC codes 19 10 03*, 19 10 05*, 19 12 11* 19 02 04*, and 16 02 15* to Table S2.2, to allow the acceptance, storage, and treatment of SMW and to allow Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Additional Information received in response to Request for Further Information (RFI)	24/03/23	Document titled "Sims Smethwick BAT Assessment" received in response to the RFI.
Response to Schedule 5 Notice dated 19/05/2023	27/06/23	Email titled "SIMS Schedule 5 Request Application ZP3691ET/VOO5" received in response to questions 1a - 1c, 2, 3 and 4 of the Schedule 5 Notice.
Response to second Schedule 5 Notice dated 05/07/2023	12/07/23	Email containing documents titled "Sims shredder process route OT appendix 3 April 2022" and "Sims Smethwick Process Description _OT Appendix 4 _April 2022" received in response to questions 1a and 1b
Variation Determined	18/12/23	Varied permit issued

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

### Permit number

EPR/ZP3691ET

### Issued to

**Sims Group UK Limited** (“the operator”)

whose registered office is

**Long Marston  
Stratford-Upon-Avon  
Warwickshire  
CV37 8AQ**

company registration number 03242331

to operate regulated facilities at

**Rabone Lane  
Smethwick  
Warley  
B66 2LF**

to the extent set out in the schedules.

The notice shall take effect from 18/12/2023

Name	Date
Peter Maksymiw	18/12/2023

Authorised on behalf of the Environment Agency

## **Schedule 1**

The following condition and tables were varied or deleted as a result of the application made by the operator:

Condition 2.3.4(a) has been amended to include a new list of waste table.

Conditions 2.6.1 to 2.6.7 WEEE storage and treatment have been deleted and replaced with new WEEE conditions 2.6.1 and 2.6.2 to reflect the modern WEEE metal shredding permit template.

Conditions 2.7.1 and 2.7.2 have been deleted because the previous Improvement Conditions are now completed.

Condition 3.1.3 is added to reflect modern permit conditions.

Table S1.1 as referenced in Conditions 2.1.1, 2.1.2 and 2.3.3 has been amended by the insertion of two new installation activities 5.3 A (1)a (ii) and 5.6 A (1) a, and the deletion of activities:

- Physical treatment for the purpose of recycling.
- Hazardous waste treatment (now replaced by activity A2 in table S1.1).

Table S1.2 as referenced in Conditions 2.3.1 and 2.3.2 has been amended by adding additional Operating Techniques submitted as part of this application.

Table S1.4 Improvement Programme requirements of the previous permit variation has been deleted to acknowledge that the Improvement Conditions IC1 to IC7 are now completed.

Table S1.5 as referenced in condition 2.6.2 has been added to reflect the modern WEEE, metal permit template.

Table S2.1 and S2.2 as referenced in condition 2.3.4(a) have been amended to reflect renumbered activities.

Table S2.3 has been added to reflect the new activities and waste codes.

Table S3.1 Point source emissions to air, as referenced in condition 3.1.1, 3.5.1, and 3.5.4 has been amended to reflect the appropriate parameters and emission limits in the Waste BAT Conclusions

Table S3.2 Point source emissions to sewer as referenced in condition 3.1.1, 3.5.1 and 3.5.4 has been amended to reflect the parameters, monitoring frequency and emission limits in the Waste BAT Conclusions.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/ZP3691ET**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/ZP3691ET/V005 authorising,

**Sims Group UK Limited** (“the operator”),

whose registered office is

**Long Marston  
Stratford-Upon-Avon  
Warwickshire  
CV37 8AQ**

company registration number 03242331

to operate installations and waste operations at

**Rabone Lane  
Smethwick  
Warley  
B66 2LF**

to the extent authorised by and subject to the conditions of this permit.

<b>Name</b>	<b>Date</b>
<b>Peter Maksymiw</b>	<b>18/12/2023</b>

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1, A1 to A8 the operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1, A1 to A8 the operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.



- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).
- 2.1.2 For the following activities referenced in schedule 1, table S1.1, A1 to A7 waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### **2.2 The site**

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 to S1.3 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 All activities shall take place on impermeable surface with sealed drainage, unless otherwise specified in Table S1.1 or agreed in writing with the Environment Agency.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 tables S2.1, S2.2, S2.3 and S2.4;
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## **2.4 Hazardous waste storage**

- 2.4.1 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## **2.5 Vehicle depollution and dismantling**

- 2.5.1 The storage (including temporary storage) and treatment of waste motor vehicles shall meet the requirements of article 6(1) of the End-of-Life Vehicles Directive.

## **2.6 WEEE storage and treatment**

- 2.6.1 As a minimum, the substances, preparations and components specified in table S1.3 shall be removed from any separately collected WEEE unless the WEEE is being prepared for re-use or the operator has taken appropriate measures to ensure their removal following transfer off site.
- 2.6.2 Unless otherwise agreed in writing by the Environment Agency, WEEE shall be treated in accordance with the standards specified in table S1.5.

## **2.7 Improvement programme**

- 2.7.1 The operator shall complete the improvements specified in schedule 1 table S1.4 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.7.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

# **3 Emissions and monitoring**

## **3.1 Emissions to water, air or land**

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

## **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

### **3.3 Odour**

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 Emissions from the metal shredder shall be free from sudden noise or vibration at levels likely to cause pollution outside the site, unless the operator has used appropriate measures, including but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the sudden noise and vibration.
- 3.4.3 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency

### **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.2; and
  - (b) ambient air monitoring specified in table S3.3;
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, and S3.3 unless otherwise agreed in writing by the Environment Agency.

### **3.6 Monitoring for radioactive substances**

- 3.6.1 The operator shall carry out monitoring of all waste delivered to the site to determine, so far as reasonably practicable, whether it contains any radioactive substances.
- 3.6.2 Monitoring equipment shall be installed and operational 3 months from the issue of this permit.
- 3.6.3 The monitoring carried out to fulfil condition 3.6.1 shall include, as a minimum, use of:
- (a) fixed radiation detectors at all weighbridges at the site; and
  - (b) a hand held detector to investigate alarms generated by the equipment in (a) above.
- 3.6.4 The equipment referred to in condition 3.6.3 (a) shall:
- (a) include solid state scintillation detectors;
  - (b) be positioned as close as reasonably practicable to the waste being monitored;
  - (c) have a sensitivity to gamma radiation consistent with the minimum performance as specified in the International Atomic Energy Agency recommendations in Annex IV of 'Recommendations on Monitoring and Response Procedures for Radioactive Scrap Metal', UNECE, 2006;
  - (d) include visual and audible alarms which activate on detection of radiation above a defined action level.
- 3.6.5 All radiation monitoring equipment shall be subject to a regular calibration and testing programme to ensure satisfactory performance is maintained.
- 3.6.6 The operator shall establish and maintain procedures for responding to alarms generated by the equipment referred to in condition 3.6.3.
- 3.6.7 The operator shall, without delay, inform the Environment Agency of each confirmed detection of radiation in accordance with this condition and the action taken in accordance with condition 4.3.1

### **3.7 Pests**

- 3.7.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.7.2 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.8 Fire prevention**

- 3.8.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 3.8.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 4 Information

### 4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
  - (i) off-site environmental effects; and
  - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

### 4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 For the following activities referenced in schedule 1, table S1.1, A1 to A8 a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production /treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report

assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

- 4.2.5 Within 1 month of the end of each annual period, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

### 4.3 Notifications

- 4.3.1 For the following activities referenced in schedule 1, table S1.1, A1 to A8 in the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately—
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 For the following activities referenced in schedule 1, table S1.1, A9 to A12 the Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit; or
  - (c) any significant adverse environmental effects.
- 4.3.4 Any information provided under condition 4.3.3 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.5 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.6 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

- 4.3.7 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.8 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.9 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **4.4 Interpretation**

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “immediately”, in which case it may be provided by telephone.
- 4.4.3 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “without delay”, in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.4 A(1) (b) (iv) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.	R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	Treatment consisting only of shredding and granulation of ferrous and non-ferrous metals for recovery. Waste types suitable for acceptance are limited to those specified in Table S2.1.
A2	5.3 A (1) a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities— (ii) physico-chemical treatment	Mechanical treatment of small mixed WEEE and hazardous waste. R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	Treatment limited to, shredding, granulating, sorting and separating for the purpose of recovery of constituent parts and materials. Waste types suitable for acceptance are limited to those WEEE and hazardous waste specified in Table S2.2. Liquids must be removed prior to mechanical treatment. External batteries (including powerpacks) and internal batteries designed to be accessible by the user must be removed prior to mechanical treatment. There shall be no treatment of batteries, other than sorting and separating from other wastes, and repackaging for third party processing.



A3	Section 5.6 A (1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.	R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	<p>Storage of unprocessed hazardous waste prior to treatment shall be on an impermeable surface with sealed drainage. Waste storage shall not exceed 6 months.</p> <p>All batteries shall be stored in either appropriate weatherproof containers, or in appropriate containers within a building on an impermeable surface with a sealed drainage system.</p> <p>Li-ion batteries shall be stored to prevent them from:</p> <ul style="list-style-type: none"> <li>coming into contact with any liquids</li> <li>being damaged or shorting</li> <li>being exposed to high temperatures</li> </ul> <p>Lead acid batteries shall be stored upright with terminals taped off or capped in acid proof containers to prevent leaks and short circuits.</p> <p>Waste types suitable for storage are limited to those hazardous waste specified in Table S2.3.</p>
<b>Directly Associated Activity</b>			
A4	In-feed storage of waste.	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	<p>Storage of non-hazardous waste prior to treatment from receipt of waste to treatment.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.1.</p>
A5	Pre-treatment, physical treatment for the purpose of recycling	R3: Recycling/ reclamation of organic substances which are not used as solvents	<p>From receipt of metal waste to despatch.</p> <p>Treatment consisting only of pre-treatment of ferrous and non-</p>

		R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	ferrous metals in pre-shredder for recovery. Waste types suitable for acceptance are limited to those specified in Table S2.1.
A6	Post-treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	Further sorting, separation and grading of fragmentised waste following shredder.
A7	Storage of processed materials	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).	From storage of processed materials to despatch off site for recovery. Storage of separated ferrous, non-ferrous metals, WEEE, hazardous waste and shredder residue following treatment.
A8	Site drainage discharge.	Site drainage discharge to foul sewer from the treatment and storage areas of the site.	Drainage discharge to foul sewer at point S2 as shown on plan in Schedule 7.
<b>Activity reference</b>	<b>Description of activities for waste operations</b>		<b>Limits of activities</b>
A9 Metal Recycling	<p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>R4:</b> Recycling/ reclamation of metals and metal compounds</p>		<p>Treatment operations shall be limited to treatment consisting only of sorting, separation, grading, shearing, bailing, compaction, crushing, granulation or cutting of non-hazardous waste into different components for recovery.</p> <p>Wastes shall be stored for no longer than 3 years prior to recovery.</p> <p>Buildings, covered areas or containers shall meet the following requirements: buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</p>

		<p>rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</p> <p>containers containing waste (excluding uncontaminated metal waste) shall be stored on an impermeable surface with sealed drainage system.</p> <p>Uncontaminated ferrous metal wastes or alloys and uncontaminated non-ferrous metal wastes shall be stored on hard standing or an impermeable surface.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.4.</p>
<p>A10 Vehicle storage, depollution and dismantling (authorised treatment) facility.</p>	<p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>R4:</b> Recycling/ reclamation of metals and metal compounds</p> <p><b>R5:</b> Recycling/ reclamation of other inorganic compounds</p> <p><b>R3:</b> Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)</p>	<p>Treatment operations shall be limited to treatment consisting only of depollution of waste motor vehicles and sorting, separation, grading, baling, shearing, compacting, crushing or cutting of waste into different components for recovery of wastes.</p> <p>Wastes shall be stored for no longer than 1 year prior to disposal and 3 years prior to recovery.</p> <p>No more than 50 tonnes of intact waste vehicle tyres (waste code 16 01 03) shall be stored at the site.</p> <p>Buildings, covered areas or containers shall meet the following requirements:</p> <p>buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</p> <p>rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</p> <p>containers containing waste (excluding uncontaminated metal waste) shall be stored on an impermeable surface with sealed drainage system.</p> <p>Uncontaminated plastic, glass and ferrous and non-ferrous metal wastes (including depolluted waste motor vehicles) arising from the treatment of end-of-life vehicles shall be stored on hard standing or an</p>

		<p>impermeable surface with sealed drainage system.</p> <p>There shall be no treatment of lead acid batteries, other than sorting and separating from other wastes, and repackaging for third party processing.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.4.</p>
A11 Metals washing	<p><b>R4:</b> Recycling/ reclamation of metals and metal compounds</p> <p><b>R5:</b> Recycling/ reclamation of other inorganic compounds</p>	<p>Waste types suitable for acceptance are limited to those specified in Table S2.4.</p>
A12 Waste electrical and electronic equipment authorised treatment facility.	<p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>R3:</b> Recycling/ reclamation of organic substances which are not used as solvents</p> <p><b>R4:</b> Recycling/ reclamation of metals and metal compounds</p> <p><b>R5:</b> Recycling/ reclamation of other inorganic compounds</p>	<p>Treatment operations shall be limited to:</p> <p>Treatment consisting of manual sorting, manual dismantling, repair or refurbishment only.</p> <p>Except for Small Mixed WEEE (EWC code 20 01 35*) awaiting manual sorting, manual dismantling, repair or refurbishment only, the maximum quantity of hazardous waste (in aggregate) that can be stored at the site shall not exceed 50 tonnes at any one time.</p> <p>Except for manual sorting, manual dismantling, repair and refurbishment of Small Mixed WEEE, no more than 10 tonnes per day of hazardous waste to be treated at the site under an R3, R4, R5 activity.</p> <p>Manual pre -treatment of Small Mixed WEEE shall be carried out with enclosure provided with a weatherproof covering.</p> <p>Buildings, covered areas or containers shall meet the following requirements:</p> <p>buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</p> <p>rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</p> <p>containers containing waste shall be stored on an impermeable surface with sealed drainage system.</p>

		Waste types suitable for acceptance are limited to those specified in Table S2.4.
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<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Sims Group UK Limited Site: Smethwick Rabone Lane Dust Management Plan, Version 2	All parts.	March 2014
Application for EPR/ZP3691ET/V002	All parts, except non-technical summary, Operating Techniques general introduction, reference to permitted S5.6 activity for hazardous waste storage, WEEE treatment and waste types relating to WEEE treatment.	12/09/2014
Stockpile Management and Fire Prevention Protocol V1	All Parts.	August 2015
Response to Schedule 5 Notice dated 14/01/2016	All Parts, including site plan 'Rabone Lane Site Details' (17/02/2016)	18/02/2016
Application EPR/ZP3691ET/V004 - additional information	Email and documents titled 'Shredder Process Description' and 'Smethwick Shredder Process Routing'.	15/05/2018
Application EPR/ZP3691ET/V004 - additional information	Document titled 'Sims Group UK Limited Shredder Site Waste Acceptance Procedure November 2016' that provides information on the site's waste pre-acceptance, acceptance and rejection procedures.	16/05/2018
Application EPR/ZP3691ET/V004 - additional information	Emails that contain information on ELV handling procedure and document referenced 'Sims Group UK Limited_Rabone Lane_Operating Techniques' dated June 2018 that contains information about the site's operating techniques.	01/06/2018
Application EPR/ZP3691ET/005	Document titled "Application Variation Operating techniques".	24/03/2023
Application EPR/ZP3691ET/V005 Request for Additional Information 19/12/2022	Documents titled "220308 L JER9144 FB Rabone Lane Variation" and "Application Variation site Layout 6361-0044-02".	12/01/2023
Application EPR/ZP3691ET/V005 Request for Additional Information 16/02/2023	Document titled "230323 R JER9144 JB Sims Smethwick BAT assessment V2 R1".	24/03/2023
Response to Schedule 5 notice dated 19/05/2023	Email titled "Schedule 5 Request Application ZP3691ET SIMS /V005 - Attachment 1 of 3: Schedule 5 Notice".	27/06/2023
Response to schedule 5 Notice dated 05/07/2023 EPR/ZP3691ET/V005	Documents titled "Sims Smethwick Shredder Process Route_OT Appendix 3 _April 2022" and "Sims Smethwick Process Description_OT Appendix 4 _April 22".	12/07/2023

**Table S1.3 Substances, preparations and components to be removed from separately collected WEEE**

- Capacitors containing polychlorinated biphenyls in accordance with Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)
- Mercury-containing components, such as switches or backlighting lamps
- Batteries
- Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres
- Toner cartridges, liquid and paste, as well as colour toner
- Plastic containing brominated flame retardants
- Asbestos waste and components which contain asbestos
- Cathode ray tubes
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC), or hydrocarbons (HC)
- Gas discharge lamps
- Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps
- External electric cables
- Components containing refractory ceramic fibres as described in Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
- Components containing radioactive substances with the exception of components that are below the exemption thresholds set in Article 3 of and the Annex I to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation
- Electrolyte capacitors containing “substances of concern” (height > 25mm, diameter > 25mm or proportionately similar volume)

**Table S1.4 Improvement Programme requirements**

Reference	Requirement	Date
IC1	<p>The operator shall submit a written report to the Environment Agency for assessment and written approval.</p> <p>The report must contain:</p> <ul style="list-style-type: none"> <li>• details of the programme to review and install covers on the trommel, drum magnet and conveyors that transport lighter fractions.</li> <li>• a review of the effectiveness of the above programme once completed, by monitoring particulate/dust as specified in the permit.</li> <li>• proposals for further measures to be undertaken to reduce particulate emissions at the facility (if necessary) and dates for implementation</li> </ul> <p>The operator must implement the proposals in the report in line with the timescales agreed with the Environment Agency.</p>	31/05/2024

**Table S1.5 Standards for the treatment of WEEE**

Treatment of small mixed WEEE	The mechanical treatment of small mixed WEEE must be provided with effective dust extraction and abatement to minimise release of dust.
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## Schedule 2 – Waste types, raw materials and fuels

<b>Table S2.1 Permitted waste types and quantities for storage and treatment under activities A1, A4 and A5 of Table S1.1.</b>	
<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A1 to A5 shall be less than 374,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted:	
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>Waste Code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 10	waste metal
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 04	metallic packaging
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and waste from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 06	end-of-life vehicles containing neither liquids nor other hazardous components
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 22	components not otherwise specified
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15

<b>Table S2.1 Permitted waste types and quantities for storage and treatment under activities A1, A4 and A5 of Table S1.1.</b>	
<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A1 to A5 shall be less than 374,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted:	
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>Waste Code</b>	<b>Description</b>
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous wastes
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11



**Table S2.1 Permitted waste types and quantities for storage and treatment under activities A1, A4 and A5 of Table S1.1.**

**Maximum Quantities**

The total quantity of waste accepted at the site for activities A1 to A5 shall be less than 374,999 tonnes in a year.

**Exclusions**

Wastes having any of the following characteristics shall not be accepted:

- Consisting solely or mainly of dusts, powders or loose fibres
- Wastes that are in a form which is either sludge or liquid

Waste Code	Description
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 40	metals - household/local authority

**Table S2.2 Permitted waste types and quantities for treatment under activity A2 of Table S1.1.**

<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A1 to A5 shall be less than 374,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres Wastes that are in a form which is either sludge or liquid	
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 15*	Hazardous components removed from discarded equipment
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 04*	premixed wastes composed of at least one hazardous waste
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 03*	Fluff-light fraction and dust containing dangerous substances
19 10 05*	Other fractions containing dangerous substances
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 35*	Pre-treated hazardous WEEE

<b>Table S2.3 Permitted waste types and quantities for storage and treatment under activity A3 of Table S1.1.</b>	
<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A1 to A5 shall be less than 374,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted:	
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>	
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 15*	Hazardous components removed from discarded equipment
<b>16 06</b>	<b>Batteries and accumulators</b>
16 06 01*	lead batteries
<b>19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>	
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 04*	premixed wastes composed of at least one hazardous waste
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 03*	Fluff-light fraction and dust containing dangerous substances
19 10 05*	Other fractions containing dangerous substances
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
<b>20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>	
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 35*	Pre-treated hazardous WEEE

<b>Table S2.4 Permitted Waste types and quantities for Waste Operations Activities A9 to A12</b>	
<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A9 to A12 shall be less than 74,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted:	
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>Waste Code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 10	waste metal
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 04	metallic packaging
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and waste from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 04*	end-of-life vehicles
16 01 06	end-of-life vehicles containing neither liquids nor other hazardous components
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 22	components not otherwise specified
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	non-hazardous WEEE
16 02 16	non-hazardous components removed from WEEE
<b>16 06</b>	<b>batteries and accumulators</b>
16 06 01*	Lead batteries
16 06 04	alkaline batteries
16 06 05	other batteries and accumulators

<b>Table S2.4 Permitted Waste types and quantities for Waste Operations Activities A9 to A12</b>	
<b>Maximum Quantities</b>	
The total quantity of waste accepted at the site for activities A9 to A12 shall be less than 74,999 tonnes in a year.	
<b>Exclusions</b>	
Wastes having any of the following characteristics shall not be accepted:	
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>Waste Code</b>	<b>Description</b>
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous wastes
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>

**Table S2.4 Permitted Waste types and quantities for Waste Operations Activities A9 to A12**

**Maximum Quantities**

The total quantity of waste accepted at the site for activities A9 to A12 shall be less than 74,999 tonnes in a year.

**Exclusions**

Wastes having any of the following characteristics shall not be accepted:

- Consisting solely or mainly of dusts, powders or loose fibres
- Wastes that are in a form which is either sludge or liquid

<b>Waste Code</b>	<b>Description</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 40	metals - household/local authority

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency <sup>(2)</sup>	Monitoring standard or method
Exhaust stack 1 (A1 on plan in Schedule 7)	Dust	Extraction and abatement System	5 mg/m <sup>3</sup>	Average over sample period <sup>(1)</sup>	Once every six months	BS EN 13284-1.
Exhaust stack 2 (A2 on plan in Schedule 7)	Dust		10 mg/m <sup>3</sup>			
Exhaust stack A1 and A2 (A1 and A2 on plan in Schedule 7)	Total VOCs	Metal shredder air extraction and abatement system	-	Average value of 3 consecutive measurements of at least 30 minutes	6 monthly	EN 12619
Exhaust stack A1 and A2 (A1 and A2 on plan in Schedule 7)	Brominated flame retardants	Metal shredder air extraction and abatement system	-	Average value of 3 consecutive measurements of at least 30 minutes	Annually	
	Dioxin-like polychlorinated biphenyls (PCBs)	Metal shredder air extraction and abatement system	-	Average value of 3 consecutive measurements of at least 30 minutes	Annually	EN 1948-1, 2, 4.
	Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Ti, V) (Drafting Note 2)	Metal shredder air extraction and abatement system	-	Average value of 3 consecutive measurements of at least 30 minutes	Annually	EN 14385
	Dioxins and furans (PCDD/F) (Drafting Note 2)	Metal shredder air extraction and abatement system	-		Annually	EN 1948-1, 2, 3
<p>1. Average value of three consecutive measurements of at least 30 minutes each.</p> <p>2. Monitoring frequencies may be reduced if the emission levels are proven to be sufficiently stable.</p>						

**Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period (Note 1)	Monitoring frequency (Note 2)	Monitoring standard or method	
Discharge at points S2 on plan in Schedule 7	Process water and site surface water drainage	Hydrocarbon oil index (HOI)	10 mg/l	Instantaneous (spot sample)	Monthly or prior to discharge	EN ISO 9377-2	
		Arsenic (expressed as As)	0.05 mg/l			Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15586)	
		Cadmium (expressed as Cd)	0.05 mg/l				
		Chromium (expressed as Cr)	0.15 mg/l				
		Copper (expressed as Cu)	0.5 mg/l				
		Lead (expressed as Pb) (Note 3)	0.1 mg/l				
		Nickel (expressed as Ni)	0.5 mg/l				
		Mercury (expressed as Hg)	5 µg/l				Various EN standards available (i.e. EN ISO 17852, EN ISO 12846)
		Zinc (expressed as Zn) (Note 3)	1 mg/l				

Note 1 - Relevant reference period:

- In the case of continuous discharge, daily average values, i.e., 24-hour flow-proportional composite samples.
- In the case of batch discharge, average values over the release duration taken as flow-proportional composite samples, or, provided that the effluent is appropriately mixed and homogeneous, a spot sample taken before discharge.

Note 2 – Monitoring frequencies may be reduced by written agreement of the Environment Agency if emission levels are proven to be sufficiently stable.

Note 3 - Limits apply above unless agreed otherwise by the Environment Agency



<b>Table S3.3 Ambient monitoring requirements</b>				
<b>Location or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
At a location or locations agreed in writing with the Environment Agency that will obtain reliable and representative data on particulate emissions from the waste management operations.	Total suspended particulates (TSP) unless otherwise agreed in writing with the Environment Agency.	Quarterly unless otherwise agreed in writing with the Environment Agency.	The equipment shall be operated to a procedure agreed in writing with the Environment Agency. The emissions management plan must include action levels and regular review cycles with an overriding aim to reduce particulate emissions from the facility.	Monitoring equipment shall meet the MCERTS Performance Standards for Indicative Ambient Particulate Monitors or similar standard agreed in writing with the Environment Agency. The equipment shall be calibrated in accordance with the manufacturer's recommendations or 6 monthly, whichever is first. The system must be managed and maintained by suitably trained personnel. The system must obtain representative data that must accurately reflect TSP levels produced by the site's activities.

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Air monitoring Parameters as required by condition 3.5.1	A1 and A2	Every 12 months	1 January
Emissions to sewer Parameters as required by condition 3.5.1	S2	Every 12 months	1 January

Parameter	Units
WEEE processed	tonnes
Ferrous metal recovered	tonnes
Non-ferrous metal recovered	tonnes
Other fractions recovered	tonnes
Non-metallic shredder residue	tonnes

Parameter	Frequency of assessment	Units
Water usage	Annually	m <sup>3</sup>
Energy usage	Annually	MWh
Total raw material used	Annually	tonne

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	29/06/16
Point source emissions to sewer	Emissions to Sewer Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Ambient air monitoring	Form Ambient 1 or other form as agreed in writing by the Environment Agency	29/06/16
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	29/06/16
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	29/06/16
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	29/06/16
Waste returns	E-waste returns	--

## Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the breach of permit conditions not related to limits</b>	
<b>To be notified within 24 hours of detection</b>	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

<b>(d) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

## Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	

Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“Appropriate measures” means Waste electrical and electronic equipment (WEEE); appropriate measures for permitted facilities.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“baling” means baling that utilises a hydraulic machine that using compressive forces compacts various materials into regular-shaped dense bales (typically a cube). Bales may be belted with straps or steel wire to keep the bale in its compacted state; although for most metal bales this is not necessary. Baled scrap metal may be easier to handle, store and transport than loose scrap.

“compacting” means compacting involving the flattening or crushing of compactable metal wastes to aid storage and economic transportation to the scrap processor; it is often a preparation for shredding. Compacting may be achieved using a waste handler’s loading shovel (known as “tapping”) or specially-designed hydraulic flattener.

“Contained environment” Means an environment where there is atmospheric containment. This includes areas where air egress may only be facilitated through air extraction and blowing agent capture systems

“controlled substances” means chlorofluorocarbons, other fully halogenated chlorofluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons listed in Annex I of Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer, including their isomers, whether alone or in a mixture, and whether they are virgin, recovered, recycled or reclaimed.

“cutting” means cutting typically utilising either an oxy-acetylene gas cutting torch or abrasive disc cutter to cut and/or resize large pieces of scrap metal into more manageable sizes; powder torches and plasma torches may be used to cut heat-resistant scrap e.g. pig iron, copper, bronze).

“disposal” means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“grading” means the sorting of metals to industry-agreed specifications ready for use, without the need for further treatment, by the end consumer to manufacture new metals.

“granulating” means granulated to a very small size with metal/non-metal separation by air classification and flotation.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“pests” means Birds, Vermin and Insects.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Reference 1” means the International Atomic Energy Agency recommendations in Annex IV of ‘Recommendations on Monitoring and Response Procedures for Radioactive Scrap Metal’, UNECE, 2006.

“Residual materials” means both materials and wastes resulting from the specified operations.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

1. no liquids will run off the surface otherwise than via the system
2. all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged

“separation” means separating wastes into different material types, components and grades.

“shearing” means utilises a range of hydraulic machinery that comprise hard steel blades which cut metals into manageable sizes. It may be hand-held, static or attached to mobile plant (e.g. cranes).

“sorting” means sorting that may be undertaken by hand or machinery. Sorting enables materials to be processed and recycled appropriately. It may involve separation of different waste types or the separation of different metal types including different ferrous metals, non-ferrous metals and non-metallic materials (e.g. paper and plastic). The sorted metals are graded by visual inspection, supplemented by chemical and other laboratory tests. The physical sorting may be assisted by conveyors and electromagnets.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“waste motor vehicle” means a wheeled vehicle for use on land and that does not operate on rails that is waste within the meaning of Article 3(1) of the Waste framework Directive.

“WEEE” means waste electrical and electronic equipment.

“WEEE Directive” means Directive 2012/19/EU of the European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE).

“year” means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

Where the following terms appear in the waste code list in Tables S2.1 to 2.3 they have the meaning given below.

“hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

“heavy metal” means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

“polychlorinated biphenyls and polychlorinated terphenyls” (“PCBs”) means PCBs as defined in Article 2(a) of Council Directive 96/59/EC’.

Article 2(a) says that ‘PCBs’ means:

- polychlorinated biphenyls;
- polychlorinated terphenyls;
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane; and
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight.

“stabilisation” means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste.

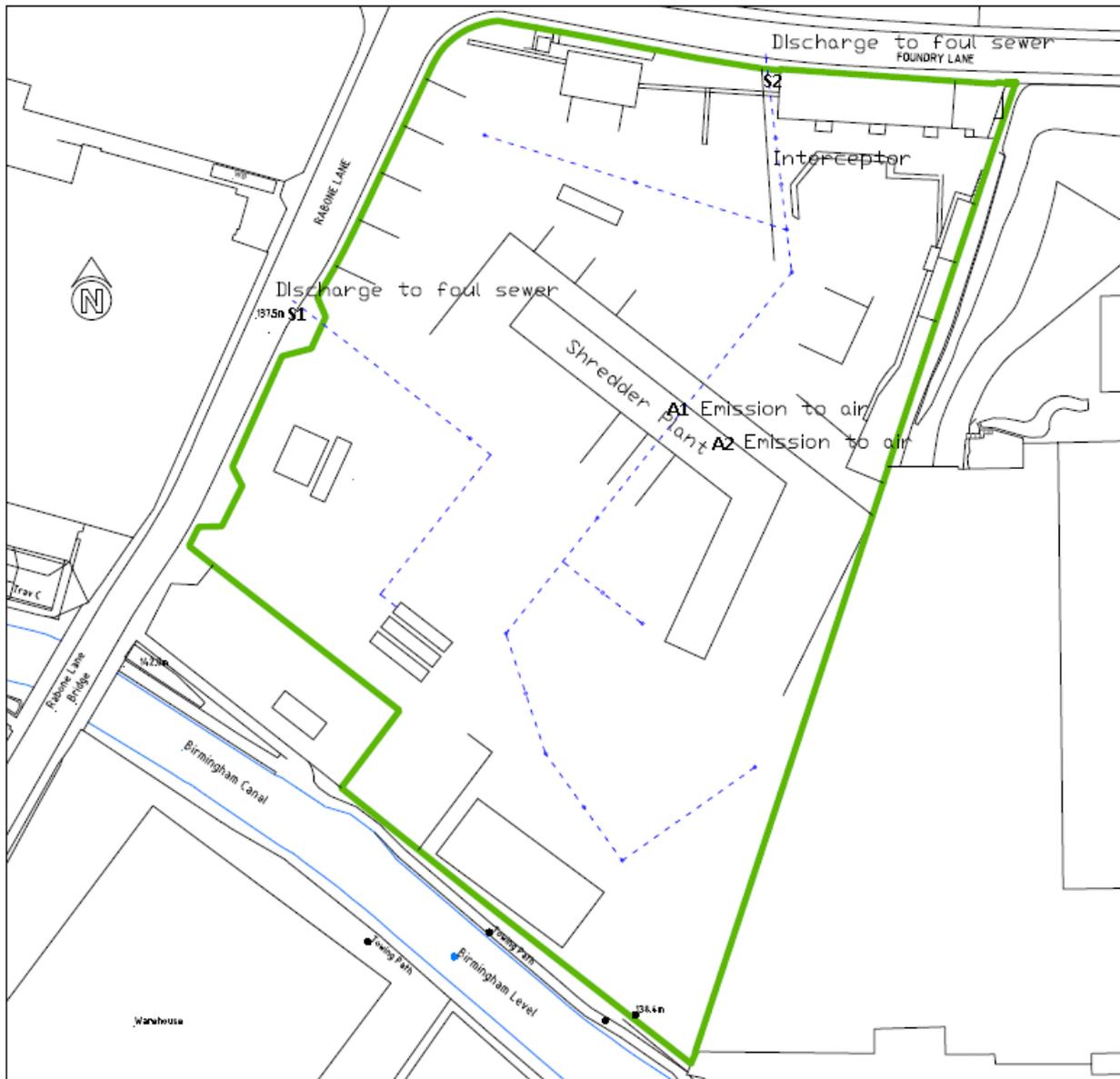
“solidification” means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste.

“transition metals” means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances.

“partly stabilised wastes” means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.



# Schedule 7 – Site plan



END OF PERMIT

**Permit Number:           EPR/ZP3691ET**

**Operator:**

**Sims Group UK Ltd**

**Facility:                   Rabone Lane**

**Form Number:**

**Air1 / 29/06/16**

**Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY**

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result [1]</b>	<b>Test Method [2]</b>	<b>Sample Date and Times [3]</b>	<b>Uncertainty [4]</b>
A1 and A2 Shredder	Total suspended particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average		As agreed with the Environment Agency		

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the ‘minimum – maximum’ measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number:       EPR/ZP3691ET**

**Operator:               Sims Group UK Ltd**

**Facility:               Rabone Lane**

**Form Number:        WaterUsage1 / 29/06/16**

**Reporting of Water Usage for the year**

<b>Water Source</b>	<b>Usage (m<sup>3</sup>/year)</b>	<b>Specific Usage (m<sup>3</sup>/unit output)</b>
Mains water		
Site borehole		
<b>TOTAL WATER USAGE</b>		

Operator's comments:

Signed .....

Date.....

(authorised to sign as representative of Operator)

**Permit Number:           EPR/ZP3691ET**

**Operator:                   Sims Group UK Ltd**

**Facility:                   Rabone Lane**

**Form Number:           Energy1 / 29/06/16**

**Reporting of Energy Usage for the year**

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
TOTAL	-		

\* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number:       EPR/ZP3691ET**

**Operator:               Sims Group UK Ltd**

**Facility:               Rabone Lane**

**Form Number:       Performance1 / 29/06/16**

**Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY**

<b>Parameter</b>	<b>Units</b>
WEEE processed	tonnes
Ferrous metal recovered	tonnes
Non-ferrous metal recovered	tonnes
Other fractions recovered	tonnes
Non-metallic shredder residue	tonnes

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number:           EPR/ZP3691ET**

**Operator:**

**Sims Group UK Ltd**

**Facility:                   Rabone Lane**

**Form Number:**

**Ambient monitoring1 /  
29/06/16**

**Reporting of ambient monitoring for the period from DD/MM/YYYY to DD/MM/YYYY**

<b>Emission Point</b>	<b>Parameter</b>	<b>Result [1]</b>	<b>Test Method [2]</b>	<b>Sample Date and Times [3]</b>	<b>Uncertainty [4]</b>
At a location or locations agreed in writing with the Environment Agency that will obtain reliable and representative data on particulate emissions from the waste management operations.	Total suspended particulates (TSP) unless otherwise agreed in writing with the Environment Agency.				

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator

## Emissions to Sewer Reporting Form

**Permit number:** ZP3691ET

**Operator:** Sims Group UK Ltd

**Facility name:** Rabone Lane Sims Group Limited Smethwick

**Emissions to Sewer Reporting Form: version 1, 08/03/2021**

Reporting of emissions to sewer for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

<b>Emission point</b>	<b>Substance / parameter</b>	<b>Emission Limit Value</b>	<b>Reference period</b>	<b>Test method <sup>1</sup></b>	<b>Result <sup>2</sup></b>	<b>Sample dates and times <sup>3</sup></b>	<b>Uncertainty <sup>4</sup></b>
<i>[e.g. S1]</i>	<i>[e.g. Total suspended solids]</i>	<i>[e.g. 30 mg/l]</i>	<i>[e.g. For 95% of all measured values of periodic samples taken over one month]</i>	<i>[e.g. BS EN 872:2005]</i>	<i>[State result]</i>	<i>[State relevant dates and time periods]</i>	<i>[State uncertainty if not 95% confidence interval]</i>

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method <sup>1</sup>	Result <sup>2</sup>	Sample dates and times <sup>3</sup>	Uncertainty <sup>4</sup>

Signed: *[Name]* Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

<sup>1</sup> Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.

<sup>2</sup> Give the result as the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, give the result as the 'minimum to maximum' of the measured values.

<sup>3</sup> For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.

<sup>4</sup> Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.



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STATUTORY INSTRUMENTS

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**2016 No. 1154**

**ENVIRONMENTAL PROTECTION,  
ENGLAND AND WALES**

**The Environmental Permitting  
(England and Wales) Regulations 2016**

*Made - - - - 11th December 2016*

*Coming into force in accordance with regulation 1(1)*

The Secretary of State and the Welsh Ministers make these Regulations in exercise of the powers conferred by—

- (a) sections 2 and 7(9) of, and Schedule 1 to, the Pollution Prevention and Control Act 1999 (“the 1999 Act”)
- (b) sections 61 and 90 of, and Schedule 8 to, the Water Act 2014 (“the 2014 Act”) M2; and
- (c) paragraph 1A of Schedule 2 to the European Communities Act 1972

The Secretary of State also makes these Regulations in exercise of the powers conferred by section 62 of the Regulatory Enforcement and Sanctions Act 2008 (“the 2008 Act”) M1.

These Regulations make provision for a purpose mentioned in section 2(2) of the European Communities Act 1972 M2 and it appears to the Secretary of State and the Welsh Ministers that it is expedient for the reference to Commission [Decision 2000/532/EC](#) M3 mentioned in paragraph 1(1) of Chapter 1 of Part 1 of Schedule 3 to these Regulations to be construed as a reference to that instrument as amended from time to time.

In accordance with section 2(4) of the 1999 Act and section 61(5) of the 2014 Act, the Secretary of State and the Welsh Ministers have consulted—

- (a) the Environment Agency,
- (b) the Natural Resources Body for Wales,
- (c) such bodies or persons appearing to them to be representative of the interests of local government, industry, agriculture and small businesses as they consider appropriate, and
- (d) such other bodies or persons as they consider appropriate.

In accordance with section 61(3) of the 2014 Act, the Secretary of State and the Welsh Ministers have had regard to the desirability of reducing burdens by ensuring that so far as is reasonably practicable any system established by regulations under that section is combined with, or is consistent with, systems for regulating activities or other matters that cause pollution.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

In accordance with section 66 of the 2008 Act, the Secretary of State is satisfied that the Environment Agency will act in accordance with the principles referred to in section 5(2) of that Act in exercising the powers in Schedule 26 to these Regulations to impose a civil sanction in relation to an offence. A draft of this instrument has been approved by a resolution of each House of Parliament and by the National Assembly for Wales pursuant to section 2(8) and (9)(d) and (e) of the 1999 Act<sup>M4</sup> and sections 62(7) and (8) and 90(3) of the 2014 Act.

#### Modifications etc. (not altering text)

- C1** Regulations excluded in part (5.3.2022) by [The Norfolk Vanguard Offshore Wind Farm Order 2022 \(S.I. 2022/138\)](#), arts. 1, **7(3)(a)** (with arts. 41, 42, Sch. 16)
- C2** Regulations excluded (1.1.2022) by [The Norfolk Boreas Offshore Wind Farm Order 2021 \(S.I. 2021/1414\)](#), arts. 1, **7(3)(a)** (with arts. 41, 42, Sch. 17 para. 66)
- C3** Regulations excluded in part (3.8.2023) by [The Hornsea Four Offshore Wind Farm Order 2023 \(S.I. 2023/800\)](#), arts. 1, **6(1)** (with arts. 6(2), 42, 43, Sch. 9 Pt. 1 para. 4, Sch. 9 Pt. 3 para. 6(1), Sch. 9 Pt. 4 para. 20, Sch. 9 Pt. 9 para. 4)
- C4** Regulations excluded in part (9.5.2024) by [The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 \(S.I. 2024/564\)](#), arts. 1, **6(1)** (with arts. 35, 36, Sch. 14)

#### Marginal Citations

- M1** 2008 c. 13.
- M2** Section 2(2) was amended by section 27(1)(a) of the Legislative and Regulatory Reform Act 2006 and by Part 1 of the Schedule to the European Union (Amendment) Act 2008.
- M3** OJ No L 226, 6.9.2000, p 3, as last amended by Commission Decision 2014/955/EU (OJ No L 370, 30.12.2014, p 44).
- M4** The reference in section 2(8) to approval by each House of Parliament has effect in relation to exercise of functions by the Welsh Ministers as if it were a reference to approval by the National Assembly for Wales by virtue of paragraph 33 of Schedule 11 to the Government of Wales Act 2006.

## PART 1

### General

#### Citation, commencement, extent and application

1.—(1) These Regulations may be cited as the Environmental Permitting (England and Wales) Regulations 2016 and come into force 21 days after the day on which these Regulations are made.

(2) These Regulations extend to England and Wales only.

(3) They apply in relation to—

- (a) England and the sea adjacent to England out as far as the seaward boundary of the territorial sea, and
- (b) Wales, within the meaning given by section 158 of the Government of Wales Act 2006<sup>M5</sup>.

(4) In paragraph (3)(a), the sea adjacent to England is so much of the sea adjacent to Great Britain as—

- (a) is not the sea adjacent to Scotland, and
- (b) does not form part of Wales.

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(5) In paragraph (4)(a), the sea adjacent to Scotland has the same meaning as the internal waters and territorial sea of the United Kingdom adjacent to Scotland has by virtue of section 126(2) of the Scotland Act 1998 <sup>M6</sup>.

#### Marginal Citations

- M5** 2006 c.32. Section 158(1) defines “Wales” as including the sea adjacent to Wales out as far as the seaward boundary of the territorial sea. Section 158(3) makes provision for the determination of any boundary between waters which are to be treated as parts of the sea adjacent to Wales and those which are not. The boundary between the sea adjacent to Wales and that adjacent to England is partly determined by article 6 of, and Schedule 3 to, [S.I. 1999/672](#). By virtue of paragraph 26 of Schedule 11 to the Government of Wales Act 2006, [S.I. 1999/672](#) continues to have effect.
- M6** 1998 c. 46. The boundaries between waters which are to be treated as internal waters or territorial sea of the United Kingdom adjacent to Scotland and those which are not are set out in [S.I. 1999/1126](#).

#### Interpretation: general

2.—(1) In these Regulations—

“the 1980 Act” means the Highways Act 1980 <sup>M7</sup>;

“the 1990 Act” means the Environmental Protection Act 1990 <sup>M8</sup>;

“the 1991 Act” means the Water Resources Act 1991 <sup>M9</sup>;

“the 1993 Act” means the Radioactive Substances Act 1993 <sup>M10</sup>;

“the 1995 Act” means the Environment Act 1995 <sup>M11</sup>;

“the 2007 Regulations” means the Environmental Permitting (England and Wales) Regulations 2007 <sup>M12</sup>;

“the 2010 Regulations” means the Environmental Permitting (England and Wales) Regulations 2010 <sup>M13</sup>;

“the Agency” means the Environment Agency;

“agricultural waste” means waste from premises used for agriculture within the meaning of the Agriculture Act 1947 <sup>M14</sup>;

“appropriate agency” means—

(a) in relation to England, the Agency, and

(b) in relation to Wales, the NRBW,

and references to the “area” of an appropriate agency are to be construed accordingly;

“appropriate authority” means—

(a) in relation to England, the Secretary of State, and

(b) in relation to Wales, the Welsh Ministers;

“Category A mining waste facility” means a mining waste facility that is classified as Category A under Article 9 of the Mining Waste Directive;

“class”, in relation to a regulated facility, is to be construed in accordance with regulation 8;

“coastal waters” has the meaning given in section 104 of the 1991 Act;

[<sup>F1</sup>“combustion plant” means any technical apparatus in which fuels are oxidised in order to use the heat generated;]

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“confidential information” means information that is commercially or industrially confidential in relation to any person;

“culvert” has the meaning given in paragraph 3(3) of Part 1 of Schedule 25;

“disposal”—

- (a) except in relation to a radioactive substances activity, has the meaning given in paragraph 2 of Part 1 of Schedule 9;
- (b) in relation to a radioactive substances activity, has the meaning given in paragraph 1 of Part 2 of Schedule 23;

“drainage” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;

“effluent” has the same meaning as in the 1991 Act;

“emission” means—

- (a) in relation to a Part A installation, the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into the air, water or land;
- (b) in relation to a Part B installation, the direct release of substances or heat from individual or diffuse sources in the installation into the air;
- (c) in relation to a solvent emission activity, the direct or indirect release of substances from individual or diffuse sources in the regulated facility into the air;
- (d) in relation to Part B mobile plant, the direct release of substances or heat from the mobile plant into the air;
- (e) in relation to a waste operation, the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources related to the operation into the air, water or land;
- (f) in relation to a mining waste operation, the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources related to the operation into the air, water or land;
- (g) in relation to a radioactive substances activity, the direct or indirect release of radioactive material or radioactive waste;
- (h) in relation to a small waste incineration plant, the direct or indirect release of substances from individual or diffuse sources in the regulated facility into the air or water;
- (i) [<sup>F2</sup>in relation to a medium combustion plant, the release of substances from the plant into the air;
- (j) in relation to a specified generator, the release of substances from the plant into the air;]

“enforcement notice” means a notice served under regulation 36;

“enforcement undertaking” has the meaning given in paragraph 1(3) of Schedule 26;

[<sup>F3</sup>“environmental objectives” means—

- (a) in relation to the Northumbria River Basin District, means the environmental objectives referred to in the WFD Regulations as applied by regulation 5 of the Water Environment (Water Framework Directive) (Northumbria River Basin District) Regulations 2003;
- (b) in relation to the Solway Tweed River Basin District, means the objectives as defined in regulation 2 of the Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004;
- (c) in relation to a river basin district within the meaning of the WFD Regulations, has the same meaning as in those Regulations;]

“environmental permit” has the meaning given in regulation 13(1);

- “environmental permit condition” means a condition of an environmental permit;
- “establishment” has the same meaning as in the Waste Framework Directive;
- [<sup>F4</sup>“EU-derived domestic legislation” has the meaning given by section 2(2) of the European Union (Withdrawal) Act 2018;]
- “excluded flood risk activity” has the meaning given in paragraph 4 of Part 1 of Schedule 25;
- “excluded waste operation” means any part of a waste operation not carried on at an installation or by means of Part B mobile plant—
- (a) that—
- (i) requires a marine licence under the Marine and Coastal Access Act 2009 <sup>M15</sup>, or
- (ii) does not require such a licence by virtue of any provision made by or under section 74, 75 <sup>M16</sup> or 77 of that Act and does not involve the dismantling of a ship that is waste, or
- (b) that relates to waste described in regulation 3(2) of the Controlled Waste (England and Wales) Regulations 2012 <sup>M17</sup>;
- “exempt facility” has the meaning given in regulation 5;
- “exempt flood risk activity” has the meaning given in regulation 5;
- “exempt groundwater activity” has the meaning given in regulation 5;
- “exempt waste operation” has the meaning given in regulation 5;
- “exempt water discharge activity” has the meaning given in regulation 5;
- “exemption authority” has the meaning given in paragraph 2 of Schedule 2;
- “exemption registration authority” has the meaning given in paragraph 2 of Schedule 2;
- “existing mining waste facility” means a mining waste facility in operation on 1st May 2008;
- “extractive waste” means waste within the meaning of Article 2(1) of the Mining Waste Directive, except where it is excluded from the scope of that Directive by Article 2(2)(a) and (b);
- “flood defence structure” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;
- “flood risk activity” has the meaning given in paragraph 3 of Part 1 of Schedule 25;
- “flood risk activity emergency works notice” means a notice served under paragraph 7 of Part 1 of Schedule 25;
- “flood risk activity notice of intent” means a notice served under paragraph 9(2) of Part 1 of Schedule 25;
- “flood risk activity remediation notice” means a notice served under paragraph 8 of Part 1 of Schedule 25;
- “groundwater” means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;
- “groundwater activity” has the meaning given in paragraph 3 of Schedule 22;
- [<sup>F5</sup>“groundwater mobile plant” means plant that is—
- (a) designed to move or be moved whether on roads or other land,
- (b) used to carry on a groundwater activity, and
- (c) not an installation or Part B mobile plant;]
- [<sup>F5</sup>“groundwater Source Protection Zone 1” means a zone—

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- (a) within 50m of a point at which water is abstracted for domestic or food production purposes from any underground strata, or
  - (b) defined by a 50-day travel time for groundwater to reach a groundwater abstraction point that is used to supply water for domestic or food production purposes,
- whichever is larger;]

“hazardous substance” has the meaning given in paragraph 4 of Schedule 22;

“hazardous waste”, subject to paragraph (7)—

- (a) in relation to England, has the meaning given in regulation 6 of the Hazardous Waste (England and Wales) Regulations 2005 <sup>M18</sup>;
- (b) in relation to Wales, has the meaning given in regulation 6 of the Hazardous Waste (Wales) Regulations 2005 <sup>M19</sup>;

“highway drain” means a drain which a highway authority or other person is entitled to keep open by virtue of section 100 of the 1980 Act <sup>M20</sup>;

“household waste” has the meaning given in section 75(5) of the 1990 Act;

“inland freshwaters” has the meaning given in section 104 of the 1991 Act;

“installation” has the meaning given in paragraph 1(1) of Part 1 of Schedule 1;

“lake or pond” and “waters of any lake or pond” have the same meaning as in section 104 of the 1991 Act;

“landfill” has the meaning given in paragraph 2(1)(d) of Schedule 10;

“landfill closure notice” means a closure notice served under paragraph 10 of Schedule 10;

“local authority” [<sup>F6</sup>, except in Schedule 1A,] has the meaning given in regulation 6;

“main river” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;

[<sup>F7</sup>“medium combustion plant” has the meaning given in paragraph 2(1) of Schedule 25A;]

“mining waste facility” has the meaning given in paragraph 2(1) of Schedule 20;

“mining waste facility closure notice” means a closure notice served under paragraph 10 of Schedule 20;

“mining waste operation” has the meaning given in paragraph 2(1) of Schedule 20;

[<sup>F8</sup>“mobile medium combustion plant” means a medium combustion plant that is—

- (a) designed to move or be moved whether on roads or other land, and
- (b) is not Part B mobile plant;]

[<sup>F5</sup>“mobile plant”, in relation to England, means any of the following—

- (a) Part B mobile plant;
- (b) waste mobile plant;
- (c) mobile medium combustion plant;
- (d) groundwater mobile plant;]

“mobile plant” [<sup>F9</sup>, in relation to Wales,] means [<sup>F10</sup>any] of the following—

- (a) Part B mobile plant;
- (b) waste mobile plant;
- (c) [<sup>F11</sup>mobile medium combustion plant;]

“mobile radioactive apparatus” has the meaning given in paragraph 1 of Part 2 of Schedule 23;

- “the NRBW” means the Natural Resources Body for Wales;
- “net rated thermal input” has the meaning given in paragraph 1(1) of Part 1 of Schedule 1;
- “non-hazardous waste”, subject to paragraph (7), means waste which is not hazardous waste;
- “non-tidal main river” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;
- “nuclear site”, in relation to a radioactive substances activity, has the meaning given in paragraph 1 of Part 2 of Schedule 23;
- “operate a regulated facility” and “operator” have the meaning given in regulation 7;
- “Part A(1) activity” means an activity falling within Part A(1) of any Section in Part 2 of Schedule 1;
- “Part A(2) activity” means an activity falling within Part A(2) of any Section in Part 2 of Schedule 1;
- “Part A installation” means a Part A(1) installation or a Part A(2) installation;
- “Part A(1) installation” means an installation where a Part A(1) activity is carried on either alone or in combination with any or all of the following—
- a Part A(2) activity;
  - a Part B activity;
  - the operation of a small waste incineration plant;
  - a solvent emission activity;
- “Part A(2) installation” means an installation where a Part A(2) activity is carried on either alone or in combination with any or all of the following—
- a Part B activity;
  - the operation of a small waste incineration plant;
  - a solvent emission activity;
- “Part B activity” means an activity falling within Part B of any Section in Part 2 of Schedule 1;
- “Part B installation” means, subject to [F12]paragraph (8) and to] Sections 2.2, 5.1 and 6.4 in Part 2 of Schedule 1, an installation, not being a Part A installation, where a Part B activity is carried on either alone or in combination with either or both of the following—
- the operation of a small waste incineration plant;
  - a solvent emission activity;
- “Part B mobile plant” means plant that is designed to move or be moved whether on roads or other land and that is used to carry on a Part B activity;
- [F5]“pollutant”, in relation to England, means any—
- substance,
  - heat, or
  - biological entity or micro-organism,
- which is liable to cause pollution;]
- “pollutant” [F13, in relation to Wales,] means any substance liable to cause pollution;
- [F5]“pollution”, in relation to England, in relation to a water discharge activity or groundwater activity, means the direct or indirect introduction, as a result of human activity, of substances, heat or biological entities or micro-organisms into air, water or land which may—
- be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,

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- (b) result in damage to material property, or
  - (c) impair or interfere with amenities or other legitimate uses of the environment;]
- “pollution” [<sup>F14</sup>, in relation to Wales,] in relation to a water discharge activity or groundwater activity, means the direct or indirect introduction, as a result of human activity, of substances or heat into the air, water or land which may—
- (a) be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,
  - (b) result in damage to material property, or
  - (c) impair or interfere with amenities or other legitimate uses of the environment;
- “pollution”, other than in relation to a water discharge activity or groundwater activity, means any emission as a result of human activity which may—
- (a) be harmful to human health or the quality of the environment,
  - (b) cause offence to a human sense,
  - (c) result in damage to material property, or
  - (d) impair or interfere with amenities or other legitimate uses of the environment;
- “prescribed statutory provision” means—
- (a) Part 4 of the Marine and Coastal Access Act 2009 <sup>M21</sup>,
  - (b) section 163 of the 1991 Act <sup>M22</sup>,
  - (c) section 165 of the Water Industry Act 1991 <sup>M23</sup>, or
  - (d) any local statutory provision (within the meaning given in section 221 of the 1991 Act) or statutory order which expressly confers power to discharge effluent into water;
- “prohibition notice” means a notice served under paragraph 9 of Schedule 22;
- “proposed transferee” means the person to whom an operator or a regulator proposes to transfer an environmental permit in whole or in part;
- “public participation provisions” means regulations 26, 29 and 60, and paragraphs 6 and 8 of Part 1 of Schedule 5;
- “public register” has the meaning given in regulation 46(1);
- “radioactive material” has the meaning given in paragraph 3 of Part 2 of Schedule 23;
- “radioactive substances activity” has the meaning given in paragraph 11 of Part 2 of Schedule 23;
- “radioactive substances exemption” means an exemption under Part 6 of Schedule 23 from the requirement for an environmental permit in respect of a radioactive substances activity;
- “radioactive waste” has the meaning given in paragraph 3 of Part 2 of Schedule 23;
- “recovery” has the meaning given in paragraph 2 of Part 1 of Schedule 9;
- “register” and “registered”, in relation to an exempt facility, have the meanings given in paragraph 1(1) of Schedule 2;
- “regulated facility” has the meaning given in regulation 8;
- “regulator” means the authority on whom functions are conferred by regulation 32, or by a direction under regulation 33;
- “regulator-initiated variation” means the variation of an environmental permit on the initiative of the regulator under regulation 20(1);
- “relevant function” has the meaning given in regulation 9;



- “relevant territorial waters” has the meaning given in section 104(1) of the 1991 Act;
- “remote defence” has the meaning given in paragraph 3(3) of Part 1 of Schedule 25;
- “revocation notice” means a notice served under regulation 22(3);
- “river control works” has the meaning given in paragraph 3(3) of Part 1 of Schedule 25;
- “rule-making authority” means—
- (a) in relation to a regulated facility for which a local authority is the regulator, the appropriate authority, and
  - (b) in relation to any other regulated facility, the appropriate agency;
- “sea defence” has the meaning given in paragraph 3(3) of Part 1 of Schedule 25;
- “sewage effluent” has the meaning given in section 221 of the 1991 Act;
- “sewer” has the same meaning as in the 1991 Act;
- “small waste incineration plant” means a waste incineration plant or waste co-incineration plant with a capacity less than or equal to 10 tonnes per day for hazardous waste or 3 tonnes per hour for non-hazardous waste;
- “solvent emission activity” means an activity to which Chapter V of the Industrial Emissions Directive applies;
- [<sup>F15</sup>“specified generator” has the meaning given in paragraph 2(1) of Schedule 25B;]
- “standard facility” means a regulated facility described in standard rules published under regulation 26(5);
- “stand-alone flood risk activity” means a flood risk activity that is not carried on as part of the operation of a regulated facility of another class;
- “stand-alone groundwater activity” means a groundwater activity that is not carried on as part of the operation of a regulated facility of another class;
- “stand-alone water discharge activity” means a water discharge activity that is not carried on as part of the operation of a regulated facility of another class;
- “suspension notice” means a notice served under regulation 37;
- “tidal main river” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;
- “trade effluent” has the meaning given in section 221 of the 1991 Act;
- “undertaking”, except in relation to a radioactive substances activity, has the same meaning as in the Waste Framework Directive;
- “vessel”, except in Section 2.2 of Chapter 2 of Part 2 of Schedule 1 and in paragraph 14 of Part 2 of Schedule 23, has the same meaning as in the 1991 Act;
- “waste”, subject to paragraph (6), and except where otherwise defined—
- (a) in relation to Chapter 5 of Part 2 of Schedule 1 and Schedules 13 to 15, [<sup>F16</sup>17, 19, 25A and 25B], means anything that—
    - (i) is waste within the meaning of Article 3(1) of the Waste Framework Directive<sup>[F17]</sup>, as read with Articles 5 and 6 of that Directive], and
    - (ii) is not excluded from the scope of that Directive by Article 2(1)(d) of that Directive;
  - (b) in any other case means anything that—
    - (i) is waste within the meaning of Article 3(1) of the Waste Framework Directive<sup>[F17]</sup>, as read with Articles 5 and 6 of that Directive], and
    - (ii) is not excluded from the scope of that Directive by Article 2(1), (2) or (3) of that Directive;

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“waste battery” and “accumulator” have the meaning given in Article 3(7) of the Batteries Directive, but do not include any waste which is excluded from the scope of that Directive by Article 2(2);

“waste co-incineration plant” means a stationary or mobile technical unit whose main purpose is the generation of energy or production of material products and which uses waste as a regular or additional fuel or in which waste is thermally treated for the purpose of disposal through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;

“waste incineration plant” means a stationary or mobile technical unit and equipment dedicated to the thermal treatment of waste, with or without recovery of the combustion heat generated, through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;

“waste mobile plant” means plant that is—

- (a) designed to move or be moved whether on roads or other land,
- (b) used to carry on a waste operation, and
- (c) not an installation or Part B mobile plant;

“waste oil” means mineral-based lubricating or industrial oil which has become unfit for the use for which it was originally intended and, in particular, used combustion engine oil, gearbox oil, mineral lubricating oil, oil for turbines and hydraulic oil;

“waste operation” means recovery or disposal of waste;

“watercourse” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25;

“water discharge activity” has the meaning given in paragraph 3 of Schedule 21;

“WEEE” has the meaning given in Article 3(1)(e) of the WEEE Directive;

[<sup>F18</sup>“the WFD Regulations” means the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;]

“working day” means a day other than—

- (a) a Saturday or a Sunday,
- (b) Good Friday or Christmas Day, or
- (c) a day which is a bank holiday under the Banking and Financial Dealings Act 1971 <sup>M24</sup>.

(2) In paragraph (1), “statutory order” means any order, byelaw, scheme or award made under any enactment, including an order or scheme confirmed by Parliament or the National Assembly for Wales, or brought into operation in accordance with special parliamentary procedure or special procedure in the Assembly.

(3) For the purpose of calculating a period of time from one event to another event, that period—

- (a) starts at the beginning of the day on which the first event occurs, and
- (b) ends at the end of the day on which the second event occurs.

(4) In these Regulations, a power to give a direction includes a power to vary or revoke it.

(5) Paragraph (6) applies where a person (“A”)—

- (a) carries on a radioactive substances activity described in paragraph 11(2)(b) or (c) or (4) of Part 2 of Schedule 23 in respect of radioactive waste,
- (b) is exempt under regulation 12(3) from the requirement for an environmental permit in respect of that activity and that waste (“the relevant exemption”), and

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(c) the waste (“the applicable radioactive waste”) is—

- (i) NORM waste (as that term is defined in paragraph 2 of Part 6 of Schedule 23), or
- (ii) the waste described in the first, second or sixth row of column 1 of Table 6 in Part 6 of Schedule 23.

(6) Where this paragraph applies, for so long as the relevant exemption applies to A, the applicable radioactive waste must be treated for the purposes of these Regulations as if it were waste other than radioactive waste.

(7) In relation to an activity that falls within Chapter 5 of Part 2 of Schedule 1 or Schedule 13, hazardous waste means waste which displays any of the characteristics listed in Annex III to the Waste Framework Directive.

[<sup>F19</sup>(8) From the transfer date any medium combustion plant or specified generator does not form part of a Part B installation unless the operation of the plant is itself a Part B activity.

(9) In paragraph (8), “transfer date” has the meaning given in regulation 32(5C).]

#### Textual Amendments

- F1** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(a)**
- F2** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(b)**
- F3** Words in reg. 2(1) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(2)(a)**; 2020 c. 1, Sch. 5 para. 1(1)
- F4** Words in reg. 2(1) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(2)(b)**; 2020 c. 1, Sch. 5 para. 1(1)
- F5** Words in reg. 2(1) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **3(d)**
- F6** Words in reg. 2(1) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(2)(c)**; 2020 c. 1, Sch. 5 para. 1(1)
- F7** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(c)**
- F8** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(d)**
- F9** Words in reg. 2(1) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **3(a)**
- F10** Word in reg. 2(1) substituted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(e)(i)**
- F11** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(e)(ii)**
- F12** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(f)**
- F13** Words in reg. 2(1) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **3(b)**
- F14** Words in reg. 2(1) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **3(c)**
- F15** Words in reg. 2(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(g)**
- F16** Words in reg. 2(1) substituted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **3(1)(h)**
- F17** Words in reg. 2(1) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(2)(d)**; 2020 c. 1, Sch. 5 para. 1(1)

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- F18** Words in reg. 2(1) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(2)(e)**; 2020 c. 1, Sch. 5 para. 1(1)
- F19** Reg. 2(8)(9) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **3(2)**

### Marginal Citations

- M7** 1980 c. 66.
- M8** 1990 c. 43.
- M9** 1991 c. 57.
- M10** 1993 c. 12.
- M11** 1995 c. 25.
- M12** S.I. 2007/3538, amended by S.I. 2009/1307, 1799, 3381, 2010/22, 490, 675, 2011/988 and 2012/811.
- M13** S.I. 2010/675, amended by paragraph 30 of Part 2 of Schedule 12 to the Energy Act 2013 (c. 32) and by S.I. 2010/676, 2172, 2011/600 (W. 88), 988, 2043, 2933, 2012/630, 811, 2013/390, 755 (W. 90), 766, 2952, 2014/255, 517 (W. 60), 2852, 2015/324, 664, 918, 934, 1360, 1417 (W. 141), 1756, 1973, 2016/58 (W. 28), 149, 475, 691 (W. 189) and 738.
- M14** 1947 c. 48.
- M15** 2009 c. 23; Part 4 of that Act concerns marine licensing.
- M16** Section 75 was amended by S.I. 2011/405 and 2016/738.
- M17** S.I. 2012/811, to which there are amendments not relevant to these Regulations.
- M18** S.I. 2005/894, to which there are amendments not relevant to these Regulations.
- M19** S.I. 2005/1806 (W. 138), amended by S.I. 2015/1417 (W. 141); there are other amending instruments but none is relevant.
- M20** Section 100 was amended by paragraph 21 of Schedule 4 to the Local Government Act 1985 (c. 51), paragraph 62 of Schedule 25 to the Water Act 1989 (c. 15), paragraph 36(1) of Schedule 1 to the Water Consolidation (Consequential Provisions) Act 1991 (c. 60) and paragraph 9 of Schedule 7 to the Local Government (Wales) Act 1994 (c. 19).
- M21** Part 4 was amended by section 76(2) of the Energy Act 2016 (c. 20) and by S.I. 2011/405, 1043, 1210, 2015/374, 664 and 2016/738. It is prospectively amended by sections 76 to 80 of the Environment (Wales) Act 2016 (anaw. 3) from a date to be appointed.
- M22** Section 163 was amended by S.I. 2003/1615 and 2013/755 (W. 90).
- M23** 1991 c. 56.
- M24** 1971 c. 80.

### Interpretation: Directives

#### 3. In these Regulations—

“the Asbestos Directive” means Council Directive [87/217/EEC](#) on the prevention and reduction of environmental pollution by asbestos<sup>M25</sup><sup>F20</sup>, as read in accordance with paragraph 1 of Schedule 1A];

<sup>F21</sup>“the Basic Safety Standards Directive” means Council Directive 2013/59/Euratom laying down basic safety standards for the protection against the dangers arising from exposure to ionising radiation]<sup>F22</sup>, as read in accordance with paragraph 2 of Schedule 1A];

“the Batteries Directive” means Directive [2006/66/EC](#) of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators<sup>M26</sup><sup>F23</sup>, as last amended by Directive (EU) 2018/849]<sup>F24</sup>, as read in accordance with paragraph 3 of Schedule 1A];

“the End-of-Life Vehicles Directive” means Directive [2000/53/EC](#) of the European Parliament and of the Council on end-of-life vehicles<sup>M27</sup><sup>F25</sup>, as last amended by Commission Delegated Directive (EU) 2020/363]<sup>F26</sup>, as read in accordance with paragraph 4 of Schedule 1A];

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“the Energy Efficiency Directive” means Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency <sup>M28</sup>[<sup>F27</sup>], as read in accordance with paragraph 5 of Schedule 1A];

<sup>F28</sup> .....

<sup>F29</sup> .....

“the Industrial Emissions Directive” means Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) <sup>M29</sup>[<sup>F30</sup>], as read in accordance with paragraph 6 of Schedule 1A];

“the Landfill Directive” means Council Directive 1999/31/EC on the landfill of waste <sup>M30</sup>[<sup>F31</sup>], as last amended by Directive (EU) 2018/850], as read with Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of, and Annex II to, Directive 1999/31/EC <sup>M31</sup>[<sup>F32</sup>], and in accordance with paragraph 7 of Schedule 1A];

[<sup>F33</sup>“the Medium Combustion Plant Directive” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants]]<sup>F34</sup>, as read in accordance with paragraph 8 of Schedule 1A];

“the Mining Waste Directive” means Directive 2006/21/EC of the European Parliament and of the Council on the management of waste from extractive industries <sup>M32</sup>[<sup>F35</sup>], as read in accordance with paragraph 9 of Schedule 1A];

“PVR I” means European Parliament and Council Directive 94/63/EC on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations <sup>M33</sup>[<sup>F36</sup>], as read in accordance with paragraph 10 of Schedule 1A];

“PVR II” means Directive 2009/126/EC of the European Parliament and of the Council on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations <sup>M34</sup>[<sup>F37</sup>], as read in accordance with paragraph 11 of Schedule 1A];

“the Waste Framework Directive” means Directive 2008/98/EC of the European Parliament and of the Council on waste [<sup>F38</sup>, as last amended by [<sup>F39</sup>Directive (EU) 2018/851]] [<sup>F40</sup>], and as read in accordance with paragraph 12 of Schedule 1A];

“the Water Framework Directive” means Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy <sup>M35</sup>[<sup>F41</sup>], as read in accordance with paragraph 13 of Schedule 1A];

“the WEEE Directive” means Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) <sup>M36</sup>[<sup>F42</sup>], as last amended by Directive (EU) 2018/849]]<sup>F43</sup>, as read in accordance with paragraph 14 of Schedule 1A].

**Textual Amendments**

- F20** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(3)(a); 2020 c. 1, Sch. 5 para. 1(1)
- F21** Words in reg. 3 substituted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), regs. 1, 3(a)
- F22** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(3)(b); 2020 c. 1, Sch. 5 para. 1(1)
- F23** Words in reg. 3 inserted (1.10.2020) by The Waste (Circular Economy) (Amendment) Regulations 2020 (S.I. 2020/904), regs. 1(1), 21(2)(a)

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- F24** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(c)**; 2020 c. 1, Sch. 5 para. 1(1)
- F25** Words in reg. 3 inserted (1.10.2020) by The Waste (Circular Economy) (Amendment) Regulations 2020 (S.I. 2020/904), regs. 1(1), **21(2)(b)**
- F26** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(d)**; 2020 c. 1, Sch. 5 para. 1(1)
- F27** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(e)**; 2020 c. 1, Sch. 5 para. 1(1)
- F28** Words in reg. 3 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(f)**; 2020 c. 1, Sch. 5 para. 1(1)
- F29** Words in reg. 3 omitted (2.5.2018) by virtue of The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), regs. 1, **3(b)**
- F30** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(g)**; 2020 c. 1, Sch. 5 para. 1(1)
- F31** Words in reg. 3 inserted (1.10.2020) by The Waste (Circular Economy) (Amendment) Regulations 2020 (S.I. 2020/904), regs. 1(1), **21(2)(c)**
- F32** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(h)**; 2020 c. 1, Sch. 5 para. 1(1)
- F33** Words in reg. 3 inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **4**
- F34** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(i)**; 2020 c. 1, Sch. 5 para. 1(1)
- F35** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(j)**; 2020 c. 1, Sch. 5 para. 1(1)
- F36** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(k)**; 2020 c. 1, Sch. 5 para. 1(1)
- F37** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(l)**; 2020 c. 1, Sch. 5 para. 1(1)
- F38** Words in reg. 3 inserted (E.) (5.7.2018) by The Environment, Food and Rural Affairs (Miscellaneous Amendments) (England) Regulations 2018 (S.I. 2018/575), art. 1(2)(d), **reg. 12(2)** and words in reg. 3 inserted (W.) (5.7.2018) by The Hazardous Waste (Miscellaneous Amendments) (Wales) Regulations 2018 (S.I. 2018/721), regs. 1(2), **6**
- F39** Words in reg. 3 substituted (1.10.2020) by The Waste (Circular Economy) (Amendment) Regulations 2020 (S.I. 2020/904), regs. 1(1), **21(2)(d)**
- F40** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(m)**; 2020 c. 1, Sch. 5 para. 1(1)
- F41** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(n)**; 2020 c. 1, Sch. 5 para. 1(1)
- F42** Words in reg. 3 inserted (1.10.2020) by The Waste (Circular Economy) (Amendment) Regulations 2020 (S.I. 2020/904), regs. 1(1), **21(2)(e)**
- F43** Words in reg. 3 inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(3)(o)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Marginal Citations

- M25** OJ No L 85, 28.3.1987, p 40, as last amended by Council Regulation (EC) No 807/2003 (OJ No L 122, 16.5.2003, p 36).
- M26** OJ No L 266, 26.9.2006, p 1, as last amended by Directive 2013/56/EU (OJ No L 329, 10.12.2013, p 5).
- M27** OJ No L 269, 21.10.2000, p 34, as last amended by Commission Directive (EU) 2016/774 (OJ No L 128, 19.5.2016, p 4).
- M28** OJ No L 315, 14.11.2012, p 1, as last amended by Council Directive 2013/12/EU (OJ No L 141, 28.5.2013, p 28).
- M29** OJ No L 334, 17.12.2010, p 17, as corrected by a corrigendum (OJ No L 158, 19.6.2012, p 25).

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- M30** OJ No L 182, 16.7.1999, p 1, as last amended by Council Directive 2011/97/EU (OJ No L 328, 10.12.2011, p 49).
- M31** OJ No L 11, 16.1.2003, p 27.
- M32** OJ No L 102, 11.4.2006, p 15, as last amended by Regulation (EC) No 596/2009 (OJ No L 188, 18.7.2009, p 14).
- M33** OJ No L 365, 31.12.1994, p 24, as last amended by Regulation (EC) No 1137/2008 (OJ No L 311, 21.11.2008, p 1).
- M34** OJ No L 285, 31.10.2009, p 36, as amended by Commission Directive 2014/99/EU (OJ No L 304, 23.10.2014, p 89).
- M35** OJ No L 327, 22.12.2000, p 1, as last amended by Commission Directive 2014/101/EU (OJ No L 311, 31.10.2014, p 32).
- M36** OJ No L 197, 24.7.2012, p 38.

#### Exempt facilities and the application of section 33(1)(a) of the 1990 Act

- 4.—(1) Schedule 2 (exempt facilities: general) has effect.
- (2) Schedule 3 (exempt facilities and waste operations to which section 33(1)(a) of the 1990 Act does not apply: descriptions and conditions) has effect.
- (3) Section 33(1)(a) of the 1990 Act <sup>M37</sup>—
- (a) does not apply to an operation which—
    - (i) falls within a description in Part 5 of Schedule 3, and
    - (ii) meets the conditions specified in that Part for that description, and
  - (b) does not apply to extractive waste at any time before the requirement for an environmental permit under regulation 12 applies in respect of the deposit of that waste.

#### Marginal Citations

**M37** Section 33(1)(a) was amended by S.I. 2007/3538 and 2009/1799.

#### Interpretation: exempt facilities

5. In these Regulations—
- “exempt facility” means—
- (a) an exempt waste operation,
  - (b) an exempt water discharge activity,
  - (c) an exempt groundwater activity, or
  - (d) an exempt flood risk activity;
- “exempt flood risk activity” means a flood risk activity that meets the requirements of paragraph 9 of Schedule 2;
- “exempt groundwater activity” means—
- (a) a stand-alone groundwater activity that meets the requirements of—
    - (i) in relation to Wales only, paragraph 7 of Schedule 2;
    - (ii) in relation to England only, paragraph 8 of Schedule 2, or
  - (b) a groundwater activity that—
    - (i) is a groundwater tracer test as defined in paragraph 1 of Part 3 of Schedule 3,

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- (ii) is also a radioactive substances activity by virtue of the using of radioactive material as a part of that test, and
- (iii) meets the requirements of—
  - (aa) in relation to Wales only, paragraph 7 of Schedule 2;
  - (bb) in relation to England only, paragraph 8 of Schedule 2;

“exempt waste operation” means a waste operation—

- (a) that is not carried on at an installation, and
- (b) that meets the requirements of paragraph 4(1) of Schedule 2;

“exempt water discharge activity” means a stand-alone water discharge activity that meets the requirements of—

- (a) in relation to Wales only, paragraph 5 of Schedule 2;
- (b) in relation to England only, paragraph 6 of Schedule 2.

### Interpretation: local authority

6.—(1) In these Regulations, [<sup>F44</sup>except in Schedule 1A,] “local authority” means—

- (a) in England outside Greater London—
  - (i) a district council,
  - (ii) where there is a county council but no district council, the county council, or
  - (iii) the Council of the Isles of Scilly;
- (b) in Greater London—
  - (i) the council of a London borough,
  - (ii) the Common Council of the City of London,
  - (iii) the Sub-Treasurer of the Inner Temple, or
  - (iv) the Under-Treasurer of the Middle Temple;
- (c) in Wales—
  - (i) a county council, or
  - (ii) a county borough council.

(2) Where a port health authority has been constituted for a port health district by an order under section 2 of the Public Health (Control of Disease) Act 1984 <sup>M38</sup> that authority is the local authority for the area covered by that district in relation to a Part B installation, a small waste incineration plant or a solvent emission activity.

#### Textual Amendments

**F44** Words in [reg. 6\(1\)](#) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(4)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Marginal Citations

**M38** 1984 c. 22.

### Interpretation: operate a regulated facility and operator

7. In these Regulations—



“operate a regulated facility” means—

- (a) operate an installation<sup>[F45]</sup>, mobile plant, a medium combustion plant or a specified generator], or
- (b) carry on a waste operation, mining waste operation, radioactive substances activity, water discharge activity, groundwater activity, small waste incineration plant operation, solvent emission activity or flood risk activity;

“operator”, in relation to a regulated facility, means—

- (a) the person who has control over the operation of the regulated facility,
- (b) if the regulated facility has not yet been put into operation, the person who will have control over the regulated facility when it is put into operation, or
- (c) if a regulated facility authorised by an environmental permit ceases to be in operation, the person who holds the environmental permit.

#### Textual Amendments

**F45** Words in reg. 7 substituted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, 5

#### Interpretation: regulated facility and class of regulated facility

**8.—(1)** In these Regulations, “regulated facility” means any of the following—

- (a) an installation;
  - (b) mobile plant;
  - (c) a waste operation;
  - (d) a mining waste operation;
  - (e) a radioactive substances activity;
  - (f) a water discharge activity;
  - (g) a groundwater activity;
  - (h) a small waste incineration plant;
  - (i) a solvent emission activity;
  - (j) a flood risk activity.
  - <sup>[F46]</sup>(k) a medium combustion plant;
  - (l) a specified generator]
- (2) But the following are not regulated facilities—
- (a) an exempt facility;
  - (b) an excluded waste operation;
  - (c) the disposal or recovery of household waste from a domestic property within the curtilage of that property by a person other than an establishment or undertaking;
  - (d) an excluded flood risk activity.

(3) In these Regulations, a reference to a class of regulated facility is a reference to a class in paragraph (1).

(4) A regulated facility of any of the following classes may be carried on as part of the operation of a regulated facility of another class—

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- (a) a waste operation;
- (b) a mining waste operation;
- (c) a water discharge activity;
- (d) a groundwater activity;
- (e) a small waste incineration plant;
- (f) a solvent emission activity;
- (g) a flood risk activity.
- [<sup>F47</sup>(h) a medium combustion plant;
- (i) a specified generator]

#### Textual Amendments

- F46** Reg. 8(1)(k)(l) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **6(a)**
- F47** Reg. 8(4)(h)(i) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **6(b)**

#### Interpretation: relevant function

- 9.** In these Regulations, “relevant function” means any of the following functions—
- (a) determining an application—
    - (i) for the grant of an environmental permit under regulation 13(1);
    - (ii) for the variation of an environmental permit under regulation 20(1);
    - (iii) for the transfer of an environmental permit in whole or in part under regulation 21(1);
    - (iv) for the surrender of an environmental permit in whole or in part under regulation 25(2);
  - (b) varying an environmental permit—
    - (i) on the initiative of the regulator under regulation 20(1);
    - (ii) in relation to a transfer in whole or in part under regulation 21(1) or (3);
    - (iii) in relation to a partial revocation under regulation 22(1);
    - (iv) in relation to a partial surrender under regulation 24(2) or 25(2);
  - (c) revoking an environmental permit in whole or in part under regulation 22(1);
  - (d) exercising the power to serve a notice under Schedule 21 or 25 requiring a person to hold an environmental permit;
  - (e) exercising the following powers or duty—
    - (i) any power in relation to standard rules in Chapter 4 of Part 2;
    - (ii) the duty to vary an environmental permit after revocation of standard rules in regulation 30(3);
  - (f) exercising any of the following powers relating to enforcement—
    - (i) the power to serve an enforcement notice;
    - (ii) the power to serve a suspension notice;
    - (iii) the power to serve a prohibition notice;
    - (iv) the power to serve a landfill closure notice;

- (v) the power to serve a mining waste facility closure notice;
- (g) exercising the power to serve a flood risk activity emergency works notice, a flood risk activity notice of intent or a flood risk activity remediation notice;
- (h) exercising the power to take steps under paragraph 9(1) of Part 1 of Schedule 25.

### **Giving notices, notifications and directions, and the submission of forms**

**10.**—(1) In this regulation, “instrument” means a notice, notification, certificate, direction or form under these Regulations.

(2) An instrument must be in writing.

(3) An instrument may be served on or given to a person by—

- (a) personal delivery,
- (b) leaving it at the person's proper address, or
- (c) sending it by post or electronic means to the person's proper address.

(4) In the case of a body corporate, an instrument may be served on or given to a director of that body or the secretary or clerk.

(5) In the case of a partnership, an instrument may be served on or given to a partner or a person having control or management of the partnership business.

(6) In paragraph (3), “proper address” means—

- (a) in the case of a body corporate, a director of the body or the secretary or clerk—
  - (i) the registered or principal office of that body, or
  - (ii) the email address of the director, secretary or clerk;
- (b) in the case of a partnership or a partner or person having control or management of the partnership business—
  - (i) the principal office of the partnership, or
  - (ii) the email address of a partner or a person having that control or management;
- (c) in any other case, a person's last known address, which includes an email address.

(7) For the purposes of paragraph (6), the principal office of a company registered outside the United Kingdom or of a partnership established outside the United Kingdom is their principal office in the United Kingdom.

(8) A form provided by the regulator which specifies an electronic address for submission may be submitted electronically to that address.

(9) A form provided by the regulator for completion and submission through a website may be submitted through that site.

## **PART 2**

### **Environmental permits**

#### **CHAPTER 1**

##### **Application to the Crown and requirement for an environmental permit**

### **Application to the Crown**

**11.** Schedule 4 (application of these Regulations to the Crown) has effect.

*Changes to legislation: The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

## Requirement for an environmental permit

12.—(1) A person must not, except under and to the extent authorised by an environmental permit—

- (a) operate a regulated facility, or
- (b) cause or knowingly permit a water discharge activity or groundwater activity.

[<sup>F48</sup>(1A) Paragraph (1)(a) does not apply in relation to the operation of a medium combustion plant, mobile medium combustion plant or a specified generator comprising—

- (a) a new medium combustion plant, before 20th December 2018;
- (b) an existing medium combustion plant with a rated thermal input greater than 5 megawatts, before 1st January 2024;
- (c) an existing medium combustion plant with a rated thermal input of less than or equal to 5 megawatts, before 1st January 2029;
- (d) a specified generator, before the permitting date,

unless that medium combustion plant, mobile medium combustion plant or specified generator, is required to have a permit by virtue of forming part of another class of regulated facility.

(1B) For the purposes of paragraph (1A)—

- (a) “existing medium combustion plant” and “new medium combustion plant” have the meanings given in paragraph 2(1) of Schedule 25A;
- (b) “permitting date” has the meaning given in paragraph 3(2) of Schedule 25B.]

(2) Paragraph (1)(b) does not apply if the water discharge activity or groundwater activity is an exempt facility.

(3) In respect of a radioactive substances activity, paragraph (1) does not apply to a person to whom a radioactive substances exemption applies for that activity.

(4) Paragraph (5) applies to a person (“A”) who—

- (a) receives radioactive waste from another person (“B”) for the purposes of A disposing of that waste, and
- (b) subsequently disposes of that waste.

(5) Where this paragraph applies, A does not require an environmental permit—

- (a) for the receipt of waste from B, where B holds an environmental permit which allows B to dispose of the waste to A, or
- (b) for the subsequent disposal of that waste by A, where the waste is disposed of in accordance with the permit held by B.

### Textual Amendments

**F48** Reg. 12(1A)(1B) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, 7

### Modifications etc. (not altering text)

**C5** Reg. 12 excluded (22.12.2017) by [The M20 Junction 10a Development Consent Order 2017 \(S.I. 2017/1202\)](#), arts. 1, **3(1)(a)** (with arts. 4, 37)

**C6** Reg. 12 excluded in part (31.5.2018) by [The Silvertown Tunnel Order 2018 \(S.I. 2018/574\)](#), arts. 1(2), **3(1)(o)**

**C7** Reg. 12 restricted (13.3.2019) by [The Port of Tilbury \(Expansion\) Order 2019 \(S.I. 2019/359\)](#), arts. 1, **3(1)(f)** (with arts. 55, 56)

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- C8** Reg. 12 excluded (1.5.2020) by The Riverside Energy Park Order 2020 (S.I. 2020/419), arts. 1, **6(2)** (with art. 7)
- C9** Reg. 12 excluded (21.5.2020) by The Lake Lothing (Lowestoft) Third Crossing Order 2020 (S.I. 2020/474), arts. 1, **3(d)** (with arts. 51, 57)
- C10** Reg. 12 excluded (15.10.2020) by The Great Yarmouth Third River Crossing Development Consent Order 2020 (S.I. 2020/1075), arts. 1, **3(1)(e)**
- C11** Reg. 12 excluded (29.10.2020) by The Southampton to London Pipeline Development Consent Order 2020 (S.I. 2020/1099), arts. 1, **36(1)(b)** (with art. 32, Sch. 9 para. 36)
- C12** Reg. 12 excluded (10.3.2022) by The Thurrock Flexible Generation Plant Development Consent Order 2022 (S.I. 2022/157), arts. 1, **10(d)** (with Sch. 8 Pt. 6 para. 19)
- C13** Reg. 12 excluded (2.6.2022) by The M25 Junction 10/A3 Wisley Interchange Development Consent Order 2022 (S.I. 2022/549), arts. 1, **3(1)(a)(2)** (with arts. 6, 34)
- C14** Reg. 12 excluded (6.6.2022) by The M25 Junction 28 Development Consent Order 2022 (S.I. 2022/573), arts. 1, **47(1)(a)(2)** (with arts. 5, 36)
- C15** Reg. 12 excluded (8.9.2022) by The A428 Black Cat to Caxton Gibbet Development Consent Order 2022 (S.I. 2022/934), arts. 1, **3(2)(a)**
- C16** Reg. 12 excluded (18.7.2023) by The Longfield Solar Farm Order 2023 (S.I. 2023/734), arts. 1, **6(1)**
- C17** Reg. 12 excluded in part (27.7.2023) by The Boston Alternative Energy Facility Order 2023 (S.I. 2023/778), arts. 1, **40(1)** (with arts. 5, 53, Sch. 8 paras. 6, 64)
- C18** Reg. 12 excluded in part (4.8.2023) by The A303 (Amesbury to Berwick Down) Development Consent Order 2023 (S.I. 2023/834), arts. 1, **3(1)** (with arts. 6(2), 18, Sch. 11 paras. 5, 30)
- C19** Reg. 12 excluded in part (7.9.2023) by The A38 Derby Junctions Development Consent Order 2023 (S.I. 2023/923), arts. 1, **3** (with arts. 4, 45, Sch. 9 paras. 6, 46, 54(1))
- C20** Reg. 12 excluded in part (28.3.2024) by The A66 Northern Trans-Pennine Development Consent Order 2024 (S.I. 2024/360), arts. 1, **3(1)** (with arts. 18, 35, Sch. 9)
- C21** Reg. 12 excluded (3.8.2024) by The Gate Burton Energy Park Order 2024 (S.I. 2024/807), arts. 1, **6(1)** (with art. 45, Sch. 14)
- C22** Reg. 12 excluded in part (3.8.2024) by The Mallard Pass Solar Farm Order 2024 (S.I. 2024/796), arts. 1, **6(1)(e)** (with Sch. 15)
- C23** Reg. 12 excluded in part (3.8.2024) by The Sunnica Energy Farm Order 2024 (S.I. 2024/802), arts. 1, **6(1)(e)** (with art. 44, Sch. 12)
- C24** Reg. 12 excluded (27.9.2024) by The Cottam Solar Project Order 2024 (S.I. 2024/943), arts. 1, **6(1)** (with art. 48, Sch. 15)
- C25** Reg. 12(1) excluded (11.2.2021) by High Speed Rail (West Midlands - Crewe) Act 2021 (c. 2), s. 64(1), **Sch. 21 para. 4(1)**
- C26** Reg. 12(1)(a) excluded (23.2.2017) by High Speed Rail (London - West Midlands) Act 2017 (c. 7), s. 70(1), **Sch. 21 para. 4**
- C27** Reg. 12(1)(a) excluded (18.4.2018) by The Network Rail (Hope Valley Capacity) Order 2018 (S.I. 2018/446), arts. 1, **5(1)(a)** (with arts. 24(8), 33(2))
- C28** Reg. 12(1)(a) excluded (24.8.2018) by The Network Rail (Werrington Grade Separation) Order 2018 (S.I. 2018/923), arts. 1, **5(1)(a)** (with art. 31(2))
- C29** Reg. 12(1)(a) excluded (25.2.2020) by The Network Rail (East West Rail) (Bicester to Bedford Improvements) Order 2020 (S.I. 2020/114), arts. 1, **5(1)(a)** (with art. 37(2))
- C30** Reg. 12(1)(a) excluded (4.3.2020) by The Midland Metro (Birmingham Eastside Extension) Order 2020 (S.I. 2020/141), arts. 1, **6** (with arts. 47, 48, Sch. 10 para. 19)
- C31** Reg. 12(1)(a) excluded (31.12.2020) by The Network Rail (Cambridgeshire Level Crossing Reduction) Order 2020 (S.I. 2020/1485), arts. 1, **4(1)(a)**  
Reg. 12(1)(a) excluded (19.1.2021) by The Network Rail (Suffolk Level Crossing Reduction) Order 2020 (S.I. 2020/1663), arts. 1, **4(a)**
- C32** Reg. 12(1)(a) excluded in part (30.6.2022) by The Network Rail (Essex and Others Level Crossing Reduction) Order 2022 (S.I. 2022/651), arts. 1, **4(1)(a)**
- C33** Reg. 12(1)(a) excluded (3.11.2022) by The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order 2022 (S.I. 2022/1067), arts. 1, **5(1)(a)**

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- C34** Reg. 12(1)(a) excluded (11.1.2023) by The Network Rail (Cambridge South Infrastructure Enhancements) Order 2022 (S.I. 2022/1406), arts. 1, 5 (with art. 34(2), Sch. 12 paras. 5, 47, 79)
- C35** Reg. 12(1)(a) excluded (2.8.2023) by The Rother Valley Railway (Bodiam to Robertsbridge Junction) Order 2023 (S.I. 2023/815), arts. 1, 5(1)(a) (with art. 42)

## CHAPTER 2

### Grant of an environmental permit

#### Grant of an environmental permit

**13.—**(1) On the application of an operator, the regulator may grant the operator a permit (an “environmental permit”) authorising—

- (a) the operation of a regulated facility, and
- (b) that operator as the person authorised to operate that regulated facility.

(2) Regulation 17 applies in relation to the grant of a single permit authorising the operation of more than one regulated facility by the same operator.

(3) Part 1 of Schedule 5 applies in relation to an application for the grant of an environmental permit.

#### Content and form of an environmental permit

**14.—**(1) An environmental permit must specify—

- (a) the regulated facility whose operation it authorises, and
- (b) the operator of that regulated facility.

(2) An environmental permit that authorises the operation of a regulated facility (“regulated facility A”) need not specify any regulated facility of another class that is carried on as part of the operation of regulated facility A.

(3) An environmental permit may be in electronic form.

(4) An environmental permit must include a map, plan or other description of the site showing the geographical extent of the site of the regulated facility.

(5) But if there is more than one regulated facility on the site, the map, plan or other description need show only the combined extent of all the facilities.

(6) Paragraphs (4) and (5) do not apply to an environmental permit authorising—

- (a) the operation of mobile plant, or

[<sup>F49</sup>(aa) the keeping of radioactive material or the accumulation or removal of radioactive waste under paragraph 11(2) of Part 2 of Schedule 23, where—

- (i) the activity is described in standard rules published under regulation 26(5); and
- (ii) the permit authorises the carrying on of that activity at more than one site; or]

- (b) the carrying on of a radioactive substances activity described in paragraph 11(5) of Part 2 of Schedule 23.

#### Textual Amendments

- F49** Reg. 14(6)(aa) inserted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), regs. 1, 4

### Conditions in relation to certain land

15.—(1) Conditions in an environmental permit may require the operator to carry out works or do other things in relation to land which the operator is not entitled to do or carry out without obtaining the consent of another person.

(2) If an environmental permit contains such a condition, the person whose consent is required must grant the operator such rights as are necessary to enable the operator to comply with the condition.

(3) Part 2 of Schedule 5 (compensation) applies where such rights are granted.

(4) Conditions in an environmental permit authorising the carrying on of a flood risk activity have effect as a local land charge where those conditions—

(a) in accordance with the power in paragraph 6 of Part 1 of Schedule 25, relate to—

(i) the operation or maintenance of any structure or works, or

(ii) access to any structure, works or watercourse by the regulator, and

(b) are expressed to apply from time to time.

(5) Where the Agency proposes to grant an application in relation to a flood risk activity in England subject to a condition which has effect in accordance with paragraph (4), the regulator must give notice of the proposed condition and the period within which representations on the proposed condition are to be made (which period must not expire less than 20 days after the day on which the notice is served) to—

(a) the landowner, lessee and occupier, where none is the applicant;

(b) the landowner and lessee, where the occupier is the applicant;

(c) the landowner and occupier, where the lessee is the applicant;

(d) the lessee and occupier, where the landowner is the applicant.

(6) Where the NRBW proposes to grant an application in relation to a flood risk activity in Wales subject to a condition which has effect in accordance with paragraph (4), the regulator must not issue the relevant permit unless the applicant has demonstrated to the satisfaction of the regulator that consent for that permit to be issued subject to such a condition has been given by—

(a) the landowner, lessee and occupier, where none is the applicant;

(b) the landowner and lessee, where the occupier is the applicant;

(c) the landowner and occupier, where the lessee is the applicant;

(d) the lessee and occupier, where the landowner is the applicant.

(7) In paragraphs (5) and (6), “landowner” means the person, other than a mortgagee not in possession, who—

(a) is receiving the rack rent of the land, whether on the person's own account or as agent or trustee for another person, or

(b) would receive the rack rent if the land were let at a rack rent.

### Mobile plant operating on the site of another regulated facility: conflict of permit conditions

16. If—

(a) an environmental permit (“permit A”) authorises the operation of mobile plant on the site of another regulated facility the operation of which is authorised under a separate environmental permit (“permit B”), and

(b) there is an inconsistency between the requirements imposed by permit A and those imposed by permit B,

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the requirements imposed by permit B prevail.

### Single site permits etc.

17.—(1) Except as otherwise provided by this regulation, a regulator may not authorise the operation of more than one regulated facility under a single environmental permit.

(2) The regulator may authorise, under a single environmental permit, the operation by the same operator—

- (a) of more than one mobile plant,
- (b) of more than one radioactive substances activity described in paragraph 11(5) of Part 2 of Schedule 23,
- (c) of more than one regulated facility on the same site,
- (d) of more than one standard facility on more than one site,
- (e) of more than one flood risk activity on more than one site, or
- (f) of more than one radioactive substances activity described in paragraph 11(6) of Part 2 of Schedule 23 on more than one site, where all such activities are in respect of the use or potential use of the same premises for underground disposal (within the meaning of paragraph 11(7) of that Schedule).
- [<sup>F50</sup>(g) of more than one medium combustion plant on more than one site,
- (h) of more than one specified generator on more than one site,
- (i) of more than one Part B installation that contains at least one medium combustion plant on more than one site]

(3) But if a groundwater activity is carried on as part of a radioactive substances activity by the same operator on the same site, the regulator must authorise the carrying on of the groundwater activity under the same environmental permit that authorises the carrying on of the radioactive substances activity.

#### Textual Amendments

**F50** Reg. 17(2)(g)-(i) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, 8

### Consolidation of an environmental permit

18.—(1) Paragraph (2) applies if the same operator is authorised by more than one environmental permit to operate—

- (a) more than one mobile plant,
- (b) more than one flood risk activity on the same site or on more than one site,
- (c) more than one standard facility, or
- (d) more than one regulated facility on the same site.

(2) The regulator may replace the environmental permits (“old permits”) with a consolidated environmental permit—

- (a) applying to the same regulated facilities, and
- (b) subject to the same conditions that applied to the old permits, but varied as the regulator thinks fit.



(3) The regulator may replace a consolidated environmental permit (“old permit”) with two or more environmental permits (“new permits”).

(4) Each of the new permits is subject to whichever conditions of the old permit are relevant, varied as the regulator thinks fit.

(5) The regulator may replace a single environmental permit (“old permit”) which has been varied with a consolidated environmental permit subject to the same conditions that applied to the old permit.

(6) A variation made by a regulator under this regulation—

- (a) is taken to be a regulator-initiated variation under regulation 20(1), and
- (b) may only be made in accordance with regulation 20.

(7) Paragraphs 17 to 19 of Part 1 of Schedule 5 apply in relation to the decision to make a regulator-initiated variation and the notification of such a decision.

### **Subsistence of an environmental permit**

**19.** Once granted, an environmental permit continues in force until—

- (a) it is revoked in whole in accordance with regulation 22,
- (b) it is surrendered in whole in accordance with—
  - (i) regulation 24, or
  - (ii) regulation 25 and Part 1 of Schedule 5,
- (c) it is replaced with a consolidated permit in accordance with any of the following—
  - (i) regulation 18(2);
  - (ii) regulation 22(5);
  - (iii) paragraph 19(2) of Part 1 of Schedule 5, or
- (d) it ceases to have effect in accordance with regulation 71(3) or (4).

## **CHAPTER 3**

### **Variation, transfer, revocation and surrender of an environmental permit**

#### **Variation of an environmental permit**

**20.—(1)** The regulator may vary an environmental permit on the application of the operator or on its own initiative.

(2) A variation under this regulation must not reduce the extent of the site of a regulated facility.

(3) Paragraph (2) does not apply if the variation relates to any part of an environmental permit (or if applicable, the whole permit) that authorises the operation of a regulated facility of the following description—

- (a) a Part B installation, except to the extent that it relates to a waste operation;
- (b) a stand-alone water discharge activity or stand-alone groundwater activity.

(4) With respect to any part of an environmental permit (or if applicable, the whole permit) that authorises the carrying on of a stand-alone water discharge activity, a regulator must not, without the agreement of the operator, on its own initiative—

- (a) within 4 years after the grant of the permit, vary any condition of the permit that relates to the water discharge activity, or
- (b) within 4 years after the variation of a condition of the permit that relates to the water discharge activity, further vary that condition.

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(5) Paragraph (4) does not apply if—

- (a) the regulated facility is a standard facility,
- (b) the regulator, on its own initiative, varies an environmental permit, or any condition of a permit, in order to comply with—
  - (i) an obligation [<sup>F51</sup>under retained EU law], or
  - (ii) a direction given by the appropriate authority under regulation 62, or
- (c) the regulator, on its own initiative, varies an environmental permit, or any condition of a permit, in consequence of a transfer or partial transfer of an environmental permit under regulation 21.

(6) Part 1 of Schedule 5 applies in relation to an application for the variation of an environmental permit or a proposal to vary an environmental permit on the initiative of the regulator under paragraph (1).

(7) With respect to any part of an environmental permit (or if applicable, the whole permit) that authorises the carrying on of a stand-alone flood risk activity, the regulator must not, without the agreement of the operator, of its own initiative vary any condition of the permit that relates to the flood risk activity unless—

- (a) in the opinion of the regulator, the circumstances in which the activity is or is to be carried on have changed such that any of the objectives in paragraph 5 of Part 1 of Schedule 25 would no longer be met, and
- (b) in the case of a variation that relates to an activity that involves any construction or works, the variation relates to aspects of the construction or works which have not yet been completed.

(8) Paragraph (7) does not apply if the regulator, of its own initiative, varies an environmental permit, or any condition of a permit, in order to comply with—

- (a) an obligation [<sup>F52</sup>under retained EU law], or
- (b) a direction given by the appropriate authority under regulation 62.

#### Textual Amendments

**F51** Words in reg. 20(5)(b)(i) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(5); 2020 c. 1, Sch. 5 para. 1(1)

**F52** Words in reg. 20(8)(a) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(5); 2020 c. 1, Sch. 5 para. 1(1)

#### Transfer of an environmental permit

**21.—(1)** The regulator may transfer to a proposed transferee an environmental permit or any part of an environmental permit—

- (a) if the operator is one individual (A) and the regulator is satisfied that A cannot be found, on the application of the proposed transferee only,
- (b) if the operator is two or more individuals (A and B) and the regulator is satisfied that A cannot be found, on the joint application of B and the proposed transferee, or
- (c) otherwise, on the joint application of the operator and the proposed transferee.

(2) Part 1 of Schedule 5 applies in relation to an application for the transfer of an environmental permit in whole or in part.

(3) Paragraph (1) does not apply to an environmental permit (or any part of a permit) that authorises the carrying on of a stand-alone water discharge activity, stand-alone groundwater activity or a stand-alone flood risk activity.

(4) The regulator may transfer to a proposed transferee an environmental permit to which paragraph (1) does not apply, or any part of that permit—

- (a) if the operator is one individual (A) and the regulator is satisfied that A cannot be found, on the notification of the proposed transferee only,
- (b) unless sub-paragraph (c) applies, if the operator is two or more individuals (A and B) and the regulator is satisfied that A cannot be found, on the joint notification of B and the proposed transferee,
- (c) if the operator is two or more individuals (A and B) and the proposed transferee is two or more individuals (B and C), where B is both an operator and a proposed transferee—
  - (i) on the joint notification of A and C, or
  - (ii) if the regulator is satisfied that A cannot be found, on the notification of C only, or
- (d) otherwise, on the joint notification of the operator and the proposed transferee.

(5) A notification must—

- (a) be made on the form provided by the regulator,
- (b) include such information as is specified on the form, and
- (c) specify a date on which the transfer is to take place, which must be not less than 20 working days after the date on which the notification is given.

(6) A transfer following a notification takes effect on the date specified in the notification.

(7) In the case of a partial transfer following a notification, the regulator must grant a new environmental permit to the transferee subject to the same conditions as the original permit, varied in consequence of the partial transfer.

(8) If—

- (a) an enforcement notice or a suspension notice is in force in respect of an environmental permit, and
- (b) the permit is transferred to another person, either in whole or in part,

the duty to comply with the enforcement notice or, as the case may be, the suspension notice is also transferred to the other person to the extent that it relates to the permit or part transferred.

(9) Unless a proposed transferee makes a joint application or gives a joint notification, the regulator may not transfer to the proposed transferee an environmental permit or any part of an environmental permit in respect of a regulated facility that ceased to be in operation more than 6 months before the proposed date of transfer.

### **Revocation of an environmental permit: general**

**22.—**(1) The regulator may revoke an environmental permit in whole or in part.

(2) If the regulator revokes an environmental permit in part, it may vary the permit conditions to the extent that it considers necessary to take account of the revocation.

(3) Where the regulator decides to revoke an environmental permit it must serve a notice on the operator specifying—

- (a) the reasons for the revocation,
- (b) in the case of a partial revocation—
  - (i) the extent to which the environmental permit is being revoked, and

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- (ii) any variation to the conditions of the environmental permit, and
  - (c) the date on which the revocation will take place, which must not be less than 20 working days after the date on which the notice is served.
- (4) Unless the regulator withdraws a revocation notice, an environmental permit ceases to have effect on the date specified in the notice—
- (a) in the case of a revocation in whole, entirely,
  - (b) in the case of a partial revocation, to the extent of the part revoked.
- (5) In the case of a partial revocation, the regulator may replace the environmental permit with a consolidated environmental permit reflecting the variation.
- (6) Any variation made by a regulator under this regulation—
- (a) is taken to be a regulator-initiated variation under regulation 20(1), and
  - (b) may only be made in accordance with regulation 20.
- (7) Paragraphs 17 to 19 of Part 1 of Schedule 5 apply in relation to the decision to make a regulator-initiated variation and the notification of such a decision.
- (8) Where an environmental permit authorises in whole or in part an operation which becomes an exempt operation, that part of the permit which authorises the exempt operation is revoked on the date that the operation is registered as an exempt operation.
- (9) In paragraph (8), “operation” means a waste operation, stand-alone water discharge activity or stand-alone groundwater activity.

#### **Revocation of an environmental permit: steps to be taken after the revocation takes effect**

- 23.—**(1) This regulation applies where the regulator has decided to revoke an environmental permit, or part of a permit, and the regulator considers that, after the revocation takes effect, it is appropriate for the operator to take steps—
- (a) to avoid a pollution risk resulting from the operation of the regulated facility, or
  - (b) to return the site of the regulated facility to a satisfactory state, having regard to the state of the site before the facility was put into operation.
- (2) But this regulation does not apply if the revocation relates to any part of an environmental permit (or if applicable, the whole permit) that authorises the operation of a regulated facility of the following description—
- (a) a Part B installation, except to the extent that it relates to a waste operation;
  - (b) mobile plant;
  - (c) a stand-alone water discharge activity or stand-alone groundwater activity.
- (3) If the operator is already required to take the steps mentioned in paragraph (1) under the environmental permit, the revocation notice must specify the regulator's view under paragraph (1) and state that paragraph (4) applies.
- (4) The environmental permit continues to have effect to the extent that it requires the steps to be taken until the regulator issues a certificate stating that it is satisfied that all the steps have been taken.
- (5) If the operator is not already required to take the steps mentioned in paragraph (1) under the environmental permit, the revocation notice must specify the regulator's view under paragraph (1) and the steps to be taken.
- (6) If paragraph (5) applies, unless the regulator issues a certificate stating that it is satisfied that all the steps have been taken, the steps must be treated as if they were conditions of an environmental permit for the purposes of—

- (a) regulation 20,
- (b) regulation 36, and
- (c) the offence in regulation 38(2).

### Notification of the surrender of an environmental permit

**24.**—(1) This regulation applies to any part of an environmental permit (or if applicable, the whole permit) that authorises the operation of a regulated facility of the following description or class—

- (a) a Part B installation, except to the extent that it relates to a waste operation;
- (b) mobile plant;
- (c) a solvent emission activity;
- (d) [<sup>F53</sup>in relation to Wales,] a stand-alone water discharge activity or stand-alone groundwater activity;
- (e) a stand-alone flood risk activity, except where the environmental permit has been granted subject to a condition that is to operate beyond the time when the activity is complete.
- [<sup>F54</sup>(f) a medium combustion plant;
- (g) a specified generator]
- [<sup>F55</sup>(h) in relation to England, a stand-alone water discharge activity or stand-alone groundwater activity other than a discharge to a well or borehole—
  - (i) which is used for hydrocarbon exploration or extraction, and
  - (ii) which intersects a hydrocarbon formation.]

(2) By notification to the regulator, the operator may surrender that part of an environmental permit (or if applicable, the whole permit) to which this regulation applies.

- (3) A notification must—
- (a) be made on the form provided by the regulator,
  - (b) include such information as is specified in the form, and
  - (c) specify the date on which the surrender is to take place, which—
    - (i) in all cases, must not be less than 20 working days after the date on which the notification is given, and
    - (ii) in the case of a stand-alone flood risk activity where the regulator has specified in the environmental permit a date by which the activity must be completed, must not be earlier than the day after that date.

(4) Subject to paragraph (7), the environmental permit ceases to have effect on the date specified in the notification to the extent specified there.

(5) Paragraphs (6) and (7) apply to a partial surrender if the regulator considers it necessary to vary the environmental permit conditions to take account of that surrender.

- (6) The regulator must serve a notice on the operator specifying—
- (a) the regulator's view under paragraph (5),
  - (b) the variation, and
  - (c) the date the variation takes effect.

(7) If the date specified in the notice under paragraph (6)(c) is later than the date specified in the notification under paragraph (3)(c), the variation and partial surrender both take effect on the later date.

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#### Textual Amendments

- F53** Words in [reg. 24\(1\)\(d\)](#) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **4(a)**
- F54** [Reg. 24\(1\)\(f\)\(g\)](#) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **9**
- F55** [Reg. 24\(1\)\(h\)](#) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **4(b)**

#### Application for the surrender of an environmental permit

**25.—(1)** This regulation applies to an environmental permit, or any part of a permit, to which regulation 24 does not apply.

(2) By application to the regulator, an operator may surrender an environmental permit, or that part of a permit, to which this regulation applies.

(3) Part 1 of Schedule 5 applies in relation to an application for the surrender of an environmental permit in whole or in part.

#### Modifications etc. (not altering text)

- C36** [Reg. 25](#) excluded (3.11.2022) by [The Network Rail \(Huddersfield to Westtown \(Dewsbury\) Improvements\) Order 2022 \(S.I. 2022/1067\)](#), arts. 1, **6(1)(a)**

## CHAPTER 4

### Standard rules

#### Preparation and revision of standard rules

**26.—(1)** A rule-making authority may prepare standard rules for such regulated facilities as are described in those rules.

(2) In preparing or revising standard rules the authority must consult—

- (a) such persons as it considers are representative of the interests of communities likely to be affected by, or persons operating, the regulated facilities described in the rules, and
- (b) such other persons as it considers are likely to be affected by or have an interest in the rules.

(3) But the duty in paragraph (2) does not apply in relation to revisions which comprise only minor administrative changes.

(4) The authority must keep under review all standard rules published by it under this regulation and revise those rules when it considers necessary.

(5) The authority must publish on its website all standard rules prepared or revised by it under this regulation.

(6) The duty in paragraph (2) may be satisfied by a consultation carried out partially or wholly before the coming into force of these Regulations.

#### Standard rules as conditions of an environmental permit

**27.—(1)** This regulation applies where a rule-making authority has published standard rules under regulation 26(5).

(2) At the request of the operator of a standard facility the regulator may include in the environmental permit authorising the operation of the facility a term providing that the relevant rules are conditions of the permit.

(3) If the regulator includes such a term, the relevant rules are conditions of the permit for the purposes of these Regulations, but there is no right of appeal under regulation 31 in relation to such a condition or the relevant rules.

(4) In this regulation, “relevant rules” means the standard rules which apply to the standard facility.

#### **Notification of revisions of standard rules**

**28.**—(1) This regulation applies where the rule-making authority proposes to revise standard rules under regulation 26(4).

(2) Before the rule-making authority complies with regulation 26(5), the regulator must notify any operator who holds a relevant environmental permit—

- (a) of the proposed revisions,
- (b) of the date when the revised rules will be published and when they take effect (in accordance with paragraph (3)), and
- (c) that on the date the revised rules take effect they will become conditions of the environmental permit.

(3) The revised rules take effect—

- (a) in relation to a relevant environmental permit, 3 months after the date when the revised rules are published under regulation 26(5), except where the revisions comprise only minor administrative changes (in which case they take effect in accordance with subparagraph (b));
- (b) in any other case, when published under regulation 26(5).

(4) In this regulation, “relevant environmental permit” means an environmental permit which will be affected by the proposed revisions.

#### **Revocation of standard rules**

**29.** The rule-making authority may revoke standard rules, but before doing so must consult the persons referred to in regulation 26(2).

#### **Variation of an environmental permit: revocation of standard rules**

**30.**—(1) This regulation applies to an environmental permit which includes a standard rules term if the standard rules applying by virtue of that term are revoked by the regulator.

(2) The revoked rules continue to have effect until the regulator varies the permit under paragraph (3).

(3) As soon as reasonably practicable after the revocation of the rules, the regulator must vary the permit so as to—

- (a) remove the standard rules term, and
- (b) include such alternative conditions as it considers appropriate.

(4) In this regulation, “standard rules term” means a term of the type mentioned in regulation 27(2).

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## CHAPTER 5

### Appeals in relation to environmental permits

#### Appeals to an appropriate authority

**31.**—(1) Subject to paragraphs (2) and (3), the following persons may appeal to the appropriate authority—

- (a) a person whose application is refused;
- (b) a person who is aggrieved by a decision to impose an environmental permit condition following that person's application;
- (c) a person who is aggrieved by a decision to impose a condition on an environmental permit held by that person—
  - (i) as a result of a regulator-initiated variation, or
  - (ii) to take account of the partial transfer, partial revocation or partial surrender of that environmental permit;
- (d) a person who is aggrieved by the deemed withdrawal under paragraph 4(2) of Part 1 of Schedule 5 of that person's duly-made application;
- (e) a person who is aggrieved by a decision relating to an environmental permit held by that person not to authorise the closure procedure mentioned in—
  - (i) Article 13 of the Landfill Directive after a request referred to in Article 13(a)(ii) of that Directive, or
  - (ii) Article 12 of the Mining Waste Directive after a request referred to in Article 12(2)(b) of that Directive;
- (f) a person on whom an enforcement notice, a revocation notice, suspension notice, prohibition notice, landfill closure notice, mining waste facility closure notice, flood risk activity emergency works notice, flood risk activity notice of intent or flood risk activity remediation notice is served.

(2) Paragraph (1) does not apply where—

- (a) the relevant decision or notice implements a direction of the appropriate authority given under—
  - (i) regulation 62(1),
  - (ii) regulation 63(1) or (6), or
  - (iii) paragraph (6) of this regulation, or
- (b) an application for the grant or variation of an environmental permit in relation to a Category A mining waste facility that is an existing mining waste facility is refused pursuant to paragraph 14(2) of Schedule 20.

(3) Paragraph (1)(f) does not apply to the extent that a revocation notice or suspension notice is served because of a failure to pay a charge prescribed in a scheme made under regulation 66(1) in respect of the subsistence of an environmental permit.

(4) On the determination of an appeal in respect of a notice, the appropriate authority—

- (a) may quash or affirm the notice, and
- (b) if it affirms the notice, may affirm it with or without modifications.

(5) When determining an appeal in respect of a decision, the appropriate authority has the same powers as the regulator had when making the decision.



(6) On the determination of an appeal in respect of a decision, unless the appropriate authority affirms the decision the authority must direct the regulator to give effect to its determination when sending a copy of it to the regulator under paragraph 6(2)(a) of Schedule 6.

(7) Except as otherwise provided by this regulation—

- (a) an appeal does not have the effect of suspending a decision or notice; but
- (b) if an appeal is brought against a revocation notice, the notice does not take effect until the final determination or the withdrawal of the appeal.

(8) Subject to paragraph (11), paragraph (7)(b) does not apply if the revocation notice—

- (a) relates to any part of an environmental permit (or if applicable, the whole permit) that authorises the carrying on of a stand-alone water discharge activity, and
- (b) states that, in the opinion of the regulator, the revocation is necessary for the purpose of preventing or, where that is not practicable, minimising, pollution.

(9) If an appeal is brought under paragraph (1)(c)(i) in respect of a decision to impose a condition on an environmental permit in relation to a stand-alone water discharge activity, the imposition of the environmental permit condition does not take effect, subject to paragraphs (10) and (11), until the final determination or the withdrawal of the appeal.

(10) Paragraph (9) does not apply if the notice effecting the decision includes a statement that, in the opinion of the regulator, the imposition of the condition is necessary for the purpose of preventing or, where that is not practicable, minimising, pollution.

(11) If the appropriate authority, on the application of the appellant, determines that the regulator acted unreasonably in excluding the application of paragraph (7)(b) or (9), then—

- (a) if the appeal is still pending at the end of the day on which the determination is made, paragraph (7)(b) or (9) applies to the decision or notice from the end of that day,
- (b) the appellant is entitled to recover compensation from the regulator in respect of any loss suffered in consequence of that exclusion, and
- (c) any dispute as to a person's entitlement to such compensation or as to the amount of it is to be determined by a single arbitrator appointed—
  - (i) by agreement between the parties to the dispute, or
  - (ii) in the absence of agreement, by the appropriate authority.

(12) Schedule 6 (appeals to the appropriate authority) has effect in relation to the making and determination of appeals under this regulation.

(13) In this regulation—

“application” has the meaning given in paragraph 1 of Part 1 of Schedule 5;

“person” includes a person to whom an environmental permit is transferred after—

- (a) an application or a decision mentioned in paragraph (1) is made, or
- (b) a notice mentioned in that paragraph is served.

## PART 3

### Discharge of functions in relation to a regulated facility

#### Discharge of functions

32.—(1) Subject to paragraphs (2) to (7), and paragraph 12 of Part 2 of Schedule 23—

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- (a) functions in relation to a regulated facility that is or will be operated in England are exercisable by the Agency;
  - (b) functions in relation to a regulated facility that is or will be operated in Wales are exercisable by the NRBW.
- (2) Subject to paragraph (4), in relation to waste mobile plant [<sup>F56</sup>and mobile medium combustion plant]—
- (a) if the principal place of business of the operator is in England, functions are exercisable by the Agency;
  - (b) if the principal place of business of the operator is in Wales, functions are exercisable by the NRBW;
  - (c) if the principal place of business of the operator is not in England or in Wales, functions are exercisable by—
    - (i) the appropriate agency that granted the environmental permit authorising the operation of that waste mobile plant [<sup>F57</sup>or mobile medium combustion plant], or
    - (ii) if no permit has been granted, the appropriate agency in whose area [<sup>F58</sup>that waste mobile plant or mobile medium combustion plant] is first intended to be operated.
- (3) Paragraph (4) applies—
- (a) where by virtue of paragraph (2) functions in relation to waste mobile plant [<sup>F59</sup>or mobile medium combustion plant] are exercisable by the Agency, and that waste mobile plant [<sup>F59</sup>or mobile medium combustion plant] is operated at a site in Wales, or
  - (b) where by virtue of paragraph (2) functions in relation to waste mobile plant [<sup>F59</sup>or mobile medium combustion plant] are exercisable by the NRBW, and that waste mobile plant [<sup>F59</sup>or mobile medium combustion plant] is operated at a site in England.
- (4) Where this paragraph applies, functions under regulations 36, 37 and 57 and paragraph 9 of [<sup>F60</sup>Schedule 22] are exercisable in relation to the waste mobile plant [<sup>F61</sup>or mobile medium combustion plant] referred to in paragraph (3) by both the Agency and the NRBW.
- (5) [<sup>F62</sup>Subject to paragraph (5A),] functions in relation to a regulated facility of the following description or class are exercisable by the local authority in whose area the regulated facility is or will be operated—
- (a) a Part A(2) installation [<sup>F63</sup>but not, from the transfer date, in respect of any medium combustion plant or specified generator, in so far as they are carried on at the installation];
  - (b) a Part B installation or Part B mobile plant, but not in respect of any of the following regulated facilities carried on at the installation or by means of mobile plant—
    - (i) a waste operation that is not itself a Part B activity;
    - (ii) a mining waste operation;
    - (iii) a water discharge activity;
    - (iv) a groundwater activity;
    - [<sup>F64</sup>(v) from the transfer date, a medium combustion plant or specified generator;]
  - (c) a small waste incineration plant;
  - (d) a solvent emission activity.
- [<sup>F65</sup>(5A) In the case of a Part B installation—
- (a) where the only activity carried on at that installation is a medium combustion plant or a specified generator, or both, and

(b) which has been authorised by an environmental permit granted by a local authority before the transfer date,  
the permit is deemed to have been granted by the appropriate agency immediately before the transfer date.

(5B) Where paragraph (5A) applies—

- (a) anything (including, without limitation, legal proceedings) which, at the transfer date, is in the process of being done by a local authority in exercise of, or in connection with, a function that is being transferred may be continued by or in relation to the appropriate agency;
- (b) anything done by or in relation to a local authority before the transfer date in the exercise of, or in connection with, a function that is being transferred is, so far as is required for continuing its effect on and after that date, to have effect as if done by or in relation to the appropriate agency;
- (c) any reference to a local authority (and any reference which is to be read as a reference to a local authority) in any document constituting or relating to anything to which the provisions of paragraph (5A) apply, is so far as it is required for giving effect to those provisions, to be treated as a reference to the appropriate agency.

(5C) In this regulation—

- (a) any reference to a medium combustion plant or to a specified generator includes any directly associated activity (as defined in paragraph 1(2) of Part 1 of Schedule 1) that, but for that medium combustion plant or specified generator, would not form part of an installation;
- (b) “transfer date” means—
  - (i) in relation to a medium combustion plant, the date specified in paragraph 1(a) or (b) of Schedule 25A, as appropriate,
  - (ii) in relation to a specified generator, the “permitting date” described in paragraph 3(2) of Schedule 25B.]

(6) If the principal place of business of the operator of Part B mobile plant is in England or in Wales, functions in relation to that regulated facility are exercisable by the local authority in whose area the place of business is.

(7) If the principal place of business of the operator of Part B mobile plant is not in England or in Wales, functions in relation to that regulated facility are exercisable by—

- (a) the local authority which granted the environmental permit authorising the operation of the regulated facility, or
- (b) if no permit has been granted, the local authority in whose area the regulated facility is first operated, or is intended to be first operated.

(8) In this regulation, “functions” includes relevant functions.

#### Textual Amendments

- F56** Words in reg. 32(2) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **10(a)(i)**
- F57** Words in reg. 32(2)(c)(i) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **10(a)(ii)**
- F58** Words in reg. 32(2)(c)(ii) substituted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **10(a)(iii)**
- F59** Words in reg. 32(3) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **10(b)**

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- F60** Words in reg. 32(4) substituted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(c)(i)**
- F61** Words in reg. 32(4) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(c)(ii)**
- F62** Words in reg. 32(5) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(d)(i)**
- F63** Words in reg. 32(5)(a) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(d)(ii)**
- F64** Reg. 32(5)(b)(v) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(d)(iii)**
- F65** Reg. 32(5A)-(5C) inserted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, **10(e)**

### Direction to a regulator: discharge of functions by a different regulator

- 33.**—(1) An appropriate authority may direct—
- (a) the appropriate agency to exercise such local authority functions as are, and for such period as is, specified in the direction, or
  - (b) a local authority to exercise such appropriate agency functions as are, and for such period as is, specified in the direction.
- (2) A direction under this regulation may include such saving and transitional provisions as the appropriate authority considers necessary or expedient.
- (3) A direction under this regulation may be made in respect of a description or class of regulated facility or a specific regulated facility.
- (4) A direction under paragraph (1)(b) may only be made in respect of—
- (a) an installation, but not in respect of a mining waste operation carried on at an installation, or
  - (b) mobile plant.
- (5) When giving a direction under this regulation the appropriate authority must notify the persons in paragraph (6) of the direction and publish the direction on its website.
- (6) The persons are—
- (a) where the appropriate authority is the Secretary of State, the Agency,
  - (b) where the appropriate authority is the Welsh Ministers, the NRBW, and
  - (c) any local authority or other person whom the appropriate authority considers is affected by the direction.
- (7) An appropriate authority must not comply with a duty under paragraph (5) in a case where the authority considers that to do so would be contrary to the interests of national security.
- (8) In paragraph (1) (ignoring any direction under this regulation)—
- “appropriate agency functions” means functions which are exercisable by the appropriate agency by virtue of regulation 32 or paragraph 2 of Schedule 2;
- “local authority functions” means functions which are exercisable by a local authority by virtue of regulation 32 or paragraph 2 of Schedule 2.

### Review of environmental permits and inspection of regulated facilities

- 34.**—(1) The regulator must periodically review environmental permits.
- (2) The regulator must make appropriate periodic inspections of regulated facilities.

### Specific provisions applying to environmental permits

**35.**—(1) Schedules 7 to [F6625B] have effect.

(2) To the extent that the operation of a regulated facility of a description or class mentioned in any of Schedules 7 to [F6625B] requires an environmental permit, the requirements of that Schedule apply in relation to that regulated facility.

#### Textual Amendments

**F66** Word in reg. 35 substituted (30.1.2018) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 (S.I. 2018/110), regs. 1, 11

## PART 4

### Enforcement and offences

#### Enforcement notices

**36.**—(1) If the regulator considers that an operator has contravened, is contravening, or is likely to contravene an environmental permit condition, the regulator may serve a notice on the operator.

(2) The notice must—

- (a) state the regulator's view under paragraph (1),
- (b) specify the matters constituting the contravention or making a contravention likely,
- (c) specify the steps that must be taken to remedy the contravention or to ensure that the likely contravention does not occur, and
- (d) specify the period within which those steps must be taken.

(3) Steps that may be specified in the notice include steps—

- (a) to make the operation of a regulated facility comply with the environmental permit conditions, and
- (b) to remedy the environmental effects caused by the contravention.

(4) In paragraph (3)(b) “environmental effects” means—

- (a) in relation to a flood risk activity—
  - (i) flooding or risk of flooding;
  - (ii) detrimental impact on drainage or risk of detrimental impact on drainage;
  - (iii) harm to the environment or risk of harm to the environment;
- (b) in relation to any other class of regulated facility, the effects of pollution.

(5) In the case of a regulated facility to which Schedule 7, 13 or 14 applies, if the regulator considers that an incident or accident significantly affecting the environment has occurred as the result of the operation of that regulated facility, the regulator may serve a notice on the operator of that facility.

(6) A notice served under paragraph (5) must—

- (a) specify the measures necessary to limit the environmental consequences of the incident or accident, and
- (b) specify the measures necessary to prevent further incidents or accidents.

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(7) The regulator may withdraw a notice under this regulation at any time by further notice served on the operator.

### Suspension notices

**37.**—(1) The regulator may suspend an environmental permit by serving a notice (a “suspension notice”) on the operator under this regulation.

(2) If the regulator considers that the operation of a regulated facility under an environmental permit involves a risk of serious pollution or, in the case of a flood risk activity, a risk specified in paragraph (3), it may serve a suspension notice on the operator.

(3) The following are risks specified for the purposes of paragraph (2)—

- (a) risk of serious flooding;
- (b) risk of serious detrimental impact on drainage;
- (c) risk of serious harm to the environment.

(4) Paragraph (2) applies whether or not the manner of operating the regulated facility which involves the risk is subject to or contravenes an environmental permit condition.

(5) If the regulator considers that the manner of operating a regulated facility contravenes an environmental permit condition, and that such contravention involves a risk of pollution or, in the case of a flood risk activity, a risk specified in paragraph (6), it may serve a suspension notice on the operator.

(6) The following are risks specified for the purposes of paragraph (5)—

- (a) risk of flooding;
- (b) risk of detrimental impact on drainage;
- (c) risk of harm to the environment.

(7) A suspension notice served for the purpose of paragraph (2) or (5) must—

- (a) specify—
  - (i) the risk mentioned in paragraph (2) or (5),
  - (ii) the steps that must be taken to remove that risk,
  - (iii) in a case where paragraph (5) applies, the matters constituting the contravention mentioned in that paragraph,
  - (iv) in a case where paragraph (5) applies, the steps that must be taken to remedy that contravention, and
  - (v) the period within which the steps mentioned in paragraph (ii) or (iv) must be taken,
- (b) state that the environmental permit ceases to have effect to the extent specified in the notice until the notice is withdrawn, and
- (c) if the environmental permit continues to authorise the operation of a regulated facility, state any steps (in addition to those already required to be taken by the environmental permit conditions) that are to be taken when operating that regulated facility.

(8) The regulator may suspend an environmental permit under regulation 66(5) by serving a suspension notice on the operator.

(9) A suspension notice served for the purpose of paragraph (8) must—

- (a) specify the reason for the suspension,
- (b) state the sum payable by the operator and the period within which it is to be paid, and
- (c) state that the environmental permit ceases to have effect to the extent specified in the notice until the notice is withdrawn.

(10) If a suspension notice is served, the environmental permit ceases to have effect to the extent stated in the notice.

(11) Where a suspension notice has the effect of preventing waste of a specified description being accepted at a regulated facility, the notice may require the operator of that facility to display appropriate signs at such places as may be specified in the notice, informing the public that no further waste of a specified description may be accepted at that facility.

(12) The regulator—

- (a) may withdraw a suspension notice at any time by further notice served on the operator, and
- (b) must withdraw a notice when satisfied that the steps specified in it have been taken.

## Offences

**38.**—(1) It is an offence for a person to—

- (a) contravene regulation 12(1), or
- (b) knowingly cause or knowingly permit the contravention of regulation 12(1)(a).

(2) It is an offence for a person to fail to comply with or to contravene an environmental permit condition.

[<sup>F67</sup>(2A) But it is not an offence for a person to fail to comply with the environmental permit conditions in Part 3 of Schedule 9 (waste operations: management and technical competence conditions).]

(3) It is an offence for a person to fail to comply with the requirements of an enforcement notice or of a prohibition notice, suspension notice, landfill closure notice, mining waste facility closure notice, flood risk activity emergency works notice or flood risk activity remediation notice.

(4) It is an offence for a person—

- (a) to fail to comply with a notice under regulation 61(1) requiring the provision of information, without reasonable excuse;
- (b) to make a statement which the person knows to be false or misleading in a material particular, or recklessly to make a statement which is false or misleading in a material particular, where the statement is made—
  - (i) in purported compliance with a requirement to provide information imposed by or under a provision of these Regulations,
  - (ii) for the purpose of obtaining the grant of an environmental permit to any person, or the variation, transfer in whole or in part, or surrender in whole or in part of an environmental permit, or
  - (iii) for the purpose of obtaining, renewing or amending the registration of an exempt facility;
- (c) intentionally to make a false entry in a record required to be kept under an environmental permit condition;
- (d) with intent to deceive—
  - (i) to forge or use a document issued or authorised to be issued or required for any purpose under an environmental permit condition, or
  - (ii) to make or have in the person's possession a document so closely resembling such a document as to be likely to deceive.

(5) It is an offence for an establishment or undertaking to—

- (a) fail to comply with paragraph 17(3) or (4) of Schedule 2, or
- (b) intentionally make a false entry in a record required to be kept under that paragraph.

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(6) If an offence committed by a person under this regulation is due to the act or default of some other person, that other person is also guilty of the offence and liable to be proceeded against and punished accordingly, whether or not proceedings for the offence are taken against the first-mentioned person.

#### Textual Amendments

**F67** Reg. 38(2A) inserted (7.4.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(2), **4(2)**

#### Penalties and enforcement undertakings

**39.**—(1) Subject to paragraph (2), a person guilty of an offence under regulation 38(1), (2) or (3) is liable—

- (a) on summary conviction to a fine or imprisonment for a term not exceeding [<sup>F68</sup>the general limit in a magistrates’ court], or to both;
- (b) on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both.

(2) A person guilty of offence under regulation 38(1), (2) or (3) in respect of a flood risk activity is liable—

- (a) on summary conviction to a fine or imprisonment for a term not exceeding [<sup>F69</sup>the general limit in a magistrates’ court], or to both;
- (b) on conviction on indictment to a fine or imprisonment for a term not exceeding 2 years, or both.

(3) In relation to an offence committed before [<sup>F70</sup>2nd May 2022], paragraphs (1)(a) and (2)(a) have effect as if for “[<sup>F71</sup>the general limit in a magistrates’ court]” there were substituted “6 months”.

(4) A person guilty of an offence under regulation 38(4) is liable—

- (a) on summary conviction to a fine;
- (b) on conviction on indictment to a fine or imprisonment for a term not exceeding 2 years, or to both.

(5) An establishment or undertaking guilty of an offence under regulation 38(5) is liable on summary conviction to a fine not exceeding level 2 on the standard scale.

(6) Schedule 26 (enforcement undertakings) has effect.

[<sup>F72</sup>(7) Schedule 26A (Variable monetary penalties (England)) has effect.]

#### Textual Amendments

**F68** Words in [reg. 39\(1\)\(a\)](#) substituted (7.2.2023 at 12.00 p.m.) by [The Judicial Review and Courts Act 2022 \(Magistrates’ Court Sentencing Powers\) Regulations 2023 \(S.I. 2023/149\)](#), regs. 1(2), 2(2), **Sch. Pt. 2**

**F69** Words in [reg. 39\(2\)\(a\)](#) substituted (7.2.2023 at 12.00 p.m.) by [The Judicial Review and Courts Act 2022 \(Magistrates’ Court Sentencing Powers\) Regulations 2023 \(S.I. 2023/149\)](#), regs. 1(2), 2(2), **Sch. Pt. 2**

**F70** Words in [reg. 39\(3\)](#) substituted (28.4.2022) by [The Criminal Justice Act 2003 \(Commencement No. 33\) and Sentencing Act 2020 \(Commencement No. 2\) Regulations 2022 \(S.I. 2022/500\)](#), regs. 1(2), 5(2), **Sch. Pt. 2**



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- F71** Words in reg. 39(3) substituted (7.2.2023 at 12.00 p.m.) by The Judicial Review and Courts Act 2022 (Magistrates' Court Sentencing Powers) Regulations 2023 (S.I. 2023/149), regs. 1(2), 2(2), **Sch. Pt. 2**
- F72** Reg. 39(7) inserted (E.) (1.12.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) (No. 2) Regulations 2023 (S.I. 2023/1046), regs. 1(1), **3**

## Defences

**40.**—(1) It is a defence for a person charged with an offence under regulation 38(1), (2) or (3) to prove that the acts alleged to constitute the contravention were done in an emergency in order to avoid danger to human health in a case where—

- (a) the person took all such steps as were reasonably practicable in the circumstances for minimising pollution, and
- (b) particulars of the acts were furnished to the regulator as soon as reasonably practicable after they were done.

(2) A person who knowingly permits a water discharge activity or groundwater activity where the discharge is water from an abandoned mine or an abandoned part of a mine is not guilty of an offence under regulation 38(1) unless—

- (a) the person is the owner or former operator of the mine or that part of it, and
- (b) the mine or the part of the mine was abandoned after 31st December 1999.

(3) In paragraph (2), “abandoned”, in relation to a mine, and “mine” have the meaning given in section 91A of the 1991 Act <sup>M39</sup>.

### Marginal Citations

**M39** Section 91A was inserted by section 58 of the 1995 Act.

## Offences by bodies corporate

**41.**—(1) If an offence committed under these Regulations by a body corporate is proved—

- (a) to have been committed with the consent or connivance of an officer, or
- (b) to be attributable to any neglect on the part of an officer,

the officer as well as the body corporate is guilty of the offence and liable to be proceeded against and punished accordingly.

(2) If the affairs of a body corporate are managed by its members, paragraph (1) applies in relation to the acts and defaults of a member in connection with the member's functions of management as if the member were a director of the body.

(3) In paragraph (1), “officer”, in relation to a body corporate, means a director, member of the committee of management, chief executive, manager, secretary or other similar officer of the body, or a person purporting to act in any such capacity.

## Enforcement by the High Court

**42.** The regulator may take proceedings in the High Court for the purpose of securing compliance with an enforcement notice, suspension notice, prohibition notice, landfill closure notice, mining waste facility closure notice, flood risk activity emergency works notice or flood risk activity remediation notice (whether or not it has taken other steps for that purpose).

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### **Admissibility of evidence**

**43.** Where, pursuant to an environmental permit granted by a local authority, an entry is required to be made in any record as to the observance of a condition of the environmental permit and the entry has not been made, that fact is admissible as evidence that the condition has not been observed.

### **Power of court to order cause of offence to be remedied**

**44.**—(1) This regulation applies where a person is convicted of an offence under regulation 38(1), (2) or (3) in respect of a matter which appears to the court to be a matter which it is in the person's power to remedy.

(2) In addition to or instead of a punishment imposed under regulation 39, the court may order the person to take such steps for remedying the matter within such period as may be specified in the order.

(3) The period may be extended, or further extended, by order of the court on an application made before the end of the period or the extended period, as the case may be.

(4) If a person is ordered to remedy a matter, that person is not liable under regulation 38 in respect of that matter during the period or the extended period.

## **PART 5**

### **Public registers**

#### **Interpretation of this Part**

**45.** In this Part—

“final confidentiality decision” means—

- (a) a determination under regulation 50, or
- (b) the determination or withdrawal of an appeal in relation to a determination under regulation 50;

“the information subject” means the person to whom information relates;

“objection notice” means a notice given under regulation 48(1)(b).

#### **Duty of the regulator to maintain a public register**

**46.**—(1) Subject to regulations 47 and 48, the regulator must maintain a register (a “public register”) containing the information in paragraph 1 of Schedule 27 (public registers).

(2) Nothing in paragraph (1) requires a public register to contain information relating to criminal proceedings, or anything which is the subject matter of criminal proceedings, before those proceedings are finally disposed of.

(3) In paragraph (2), “criminal proceedings” includes prospective criminal proceedings.

(4) The regulator must enter information on its public register as soon as reasonably practicable after it comes within the regulator's possession.

(5) Where information of any description is excluded from any public register under regulation 48, a statement must be entered on the register indicating the existence of information of that description.

(6) The regulator must—

- (a) make its public register available for public inspection at all reasonable times, free of charge, and
  - (b) enable members of the public to obtain copies of entries on its public register on payment of a reasonable charge.
- (7) A public register may be kept in any form.

### **Exclusion from public registers of information affecting national security**

47.—(1) The appropriate authority may direct the regulator that in the interests of national security specified information or information of a specified description must be excluded from a public register.

(2) The regulator must notify the appropriate authority of any information (other than information relating to a radioactive substances activity) that it excludes from a public register pursuant to such a direction.

(3) The appropriate authority may direct the regulator that in the interests of national security information of a specified description—

- (a) must be referred to the authority for its determination as to whether or not the information may be included on a public register, and
- (b) must not be included on a public register unless the appropriate authority determines that it may be included.

(4) A person may give a notice to the appropriate authority stating that, in the person's opinion, the inclusion of information on a public register would be contrary to the interests of national security.

(5) A notice under paragraph (4) must specify the information and indicate its apparent nature.

(6) A person giving a notice under paragraph (4) must at the same time notify the regulator.

(7) The regulator must not include information notified under paragraph (4) on a public register unless the appropriate authority determines that it may be included.

### **Exclusion from public registers of confidential information**

48.—(1) The regulator must exclude information from a public register, unless a condition in paragraph (2) is met, if it—

- (a) considers that the information may be confidential information, or
- (b) receives notice from the information subject which—
  - (i) states that the information subject considers the information is confidential information, and
  - (ii) gives reasons for that view.

(2) The conditions are that—

- (a) in relation to paragraph (1)(a), the regulator has given a notice under regulation 49(1) and the information subject has given notice of consent under regulation 49(2)(a);
- (b) in relation to paragraph (1)(a) or (b)—
  - (i) a final confidentiality decision that the information should be included on the register has been made, or
  - (ii) the appropriate authority has given a direction under regulation 56(1) which requires the information to be included on the register.

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### **Procedure if the regulator considers that information may be confidential**

**49.**—(1) If the regulator considers that information may be confidential information but has not received an objection notice, it must give notice of that view to the information subject.

(2) The information subject may within 15 working days after the date of the notice given by the regulator under paragraph (1)—

- (a) give notice to the regulator consenting to the regulator including the information on the register, or
- (b) give an objection notice to the regulator.

### **Duty to determine confidentiality**

**50.** The regulator must determine whether information must be included on the public register, or excluded from the public register because it is confidential information, if—

- (a) having given notice under regulation 49(1), it does not receive notice of consent in accordance with regulation 49(2)(a), or
- (b) it receives an objection notice.

### **Determination of confidentiality**

**51.**—(1) When making a determination under regulation 50, the regulator must comply with this regulation.

(2) In making the determination, the regulator must—

- (a) take any reasons given in an objection notice into account,
- (b) apply a presumption in favour of including the information on the public register, and
- (c) determine to exclude the information from the public register if it considers that—
  - (i) the information is commercial or industrial information,
  - (ii) its confidentiality is provided by law to protect a legitimate economic interest, and
  - (iii) in all the circumstances, the public interest in maintaining the confidentiality of the information outweighs the public interest in including it on the register.

(3) But, to the extent that information relates to emissions, the regulator must determine to include it on the public register.

(4) Nothing in this regulation authorises the exclusion from the public register of information contained in or otherwise held with other information excluded from the register unless the information is not reasonably capable of being separated for the purposes of inclusion on the register.

### **Procedure following a determination**

**52.**—(1) The regulator must give notice of its determination, the reasons for it and the details of the appeals procedure to the information subject within—

- (a) a period of 20 working days beginning with the date its duty under regulation 50 arises, or
- (b) such longer period as it agrees with the information subject.

(2) If the regulator fails to give notice under paragraph (1) within the period required by that paragraph, the information subject may give notice to the regulator of that failure, and on such notice—

- (a) the regulator is deemed to have determined that the information must be included on the register, and

(b) the deemed determination is subject to the right of appeal in regulation 53(1).

(3) If the regulator determines that the information must be included on the public register, it must not include the information before the expiry of the period of 15 working days after—

(a) it has given notice of the determination, or

(b) a notice under paragraph (2) resulting in a deemed determination is given,

but must include it after the expiry of that period if notice of appeal has not been given.

### **Appeals in relation to confidentiality**

**53.**—(1) The information subject may give notice of appeal to the appropriate authority against a determination made under regulation 50 within 15 working days after the regulator has given notice of it.

(2) A notice of appeal must—

(a) be in writing,

(b) include a statement of the grounds of appeal,

(c) state whether the information subject wishes the appeal to be in the form of a hearing or to be disposed of through written representations, and

(d) be copied to the regulator.

(3) If the information subject gives notice of appeal, the regulator must not include the information on the public register before the appeal is decided.

(4) The appropriate authority—

(a) may give the information subject and the regulator an opportunity of appearing before and being heard by a person appointed by it, and

(b) must do so in a case where the notice of appeal states that the information subject wishes the appeal to be in the form of a hearing.

(5) A hearing under paragraph (4) is subject to paragraphs 5(2) to 5(6) and 6 of Schedule 6 (except paragraph 5(3)(c)) as if it were a hearing under paragraph 5(1) of that Schedule, save that “the appellant” is to be read as “the information subject”.

### **Consequences of an appeal**

**54.**—(1) If the appropriate authority allows the appeal, the regulator must exclude the information from the public register.

(2) If the appropriate authority rejects the appeal or the appeal is withdrawn, the regulator must include the information on the public register.

### **Reconsideration of confidentiality**

**55.**—(1) The regulator must cease to treat information as confidential information at the expiry of—

(a) a period of 4 years after the final confidentiality decision, or

(b) such shorter period as is specified in that decision.

(2) But if the person to whom the information relates gives notice to the regulator before the expiry of that period that the person considers that the information remains confidential information—

(a) regulation 48 applies in respect of the information and the regulator must treat the notice as an objection notice, and

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- (b) regulations 50 to 54 apply notwithstanding any previous compliance with those regulations in relation to the information.

### **Directions of the appropriate authority in relation to confidentiality**

**56.**—(1) The appropriate authority may direct the regulator that specified information, or information of a specified description, must be included on the public register even though it is confidential information.

(2) The appropriate authority must not give a direction under paragraph (1) unless it considers that the public interest in including such information on the register outweighs the public interest in maintaining its confidentiality.

## **PART 6**

### **Powers and functions of the regulator and the appropriate authority**

#### **Power of the regulator to prevent or remedy pollution**

**57.**—(1) If the regulator considers that a risk of serious pollution exists as a result of the operation of a regulated facility or an exempt facility, it may arrange for steps to be taken to remove that risk.

(2) The regulator may arrange for steps to be taken to remedy the effects of pollution if—

- (a) the commission of an offence under regulation 38(1), (2) or (3) causes pollution, or
- (b) the regulator suspects that an offence under that regulation is being or has been committed and that pollution is being or has been caused as a result.

(3) If the regulator intends to arrange for steps to be taken under paragraph (2), it must notify the operator of the steps not less than 5 working days before they are taken.

(4) If the regulator arranges for steps to be taken under this regulation, it may recover the cost of taking those steps from the relevant person.

(5) But costs are not recoverable under paragraph (4)—

- (a) if the steps referred to in paragraph (1) are taken and the relevant person shows that there was no risk of serious pollution, or
- (b) to the extent that the relevant person shows that the costs were unnecessarily incurred by the regulator.

(6) In this regulation, “the relevant person” means—

- (a) an operator,
- (b) an establishment or undertaking carrying on an exempt waste operation, or
- (c) a person carrying on a water discharge activity or groundwater activity.

#### **Power of the regulator to prevent or remedy effects of flood risk activities**

**58.**—(1) If the regulator considers that the carrying on of an exempt flood risk activity or a flood risk activity under an environmental permit involves a risk specified in paragraph (2), it may arrange for steps to be taken to remove that risk.

(2) The following are risks specified for purposes of paragraph (1)—

- (a) risk of serious flooding;
- (b) risk of serious detrimental impact on drainage;
- (c) risk of serious harm to the environment.

(3) If the regulator arranges for steps to be taken under this regulation, it may recover the cost of taking those steps from the operator.

(4) But costs are not recoverable under paragraph (3)—

- (a) if the steps referred to in paragraph (1) are taken in relation to a risk specified in paragraph (2) and the operator shows there was no such risk, or
- (b) to the extent that the operator shows that the costs were unnecessarily incurred by the regulator.

#### **Appropriate agency: notices in relation to emissions to water**

**59.**—(1) This regulation applies to Part A installations for which a local authority is the regulator.

(2) At any time the appropriate agency may give notice to the local authority specifying the emission limit values or the conditions it considers appropriate for preventing or reducing emissions into water from the installation or mobile plant.

(3) If such a notice is issued, the local authority must exercise its functions under these Regulations to ensure the environmental permit for the installation or mobile plant includes—

- (a) the emission limit values or conditions specified in the notice, or
- (b) such stricter limit values or more onerous conditions as the authority thinks fit.

(4) In this regulation, “emission limit value” means the mass, expressed in terms of specific parameters, concentration or level of an emission, which must not be exceeded during a period of time.

#### **Appropriate agency: public participation statement**

**60.**—(1) The appropriate agency must prepare and publish a statement of its policies for complying with its public participation duties.

(2) In preparing or revising the statement the appropriate agency must consult such persons as it considers are affected by, are likely to be affected by, or have an interest in, the statement.

(3) The appropriate agency must—

- (a) keep the statement under review,
- (b) revise the statement when it considers necessary, and
- (c) publish any revised statement.

(4) The appropriate agency must comply with any published statement when exercising its functions under the public participation provisions.

(5) The duty in paragraph (2) may be satisfied by a consultation carried out partially or wholly before the coming into force of these Regulations.

(6) In this regulation, “public participation duties” means the duties in the following provisions—

- (a) regulation 26;
- (b) regulation 29;
- (c) paragraphs 6 and 8(2) of Part 1 of Schedule 5.

#### **Power to require the provision of information**

**61.**—(1) For the purposes of discharging its functions under these Regulations, an appropriate authority, regulator, exemption registration authority or exemption authority, by notice served on any person, may require that person to provide such information in such form and within such period as is specified in the notice.

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(2) A notice under paragraph (1) may require a person to provide any information on emissions where that requirement is reasonable, including the provision of information—

- (a) not in the person's possession, and
- (b) which would not usually come into the person's possession.

(3) For the purposes of this regulation the discharge by the appropriate authority of—

- (a) an obligation [<sup>F73</sup>under retained EU law], or
- (b) an international obligation of the United Kingdom,

must be treated as a function of the authority under these Regulations.

(4) For the purposes of this regulation the compilation of an inventory of emissions (whether or not from a regulated facility) must be treated as a function of the regulator under these Regulations.

#### Textual Amendments

**F73** Words in [reg. 61\(3\)\(a\)](#) substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), [regs. 1, 2\(5\)](#); 2020 c. 1, [Sch. 5 para. 1\(1\)](#)

#### Directions to regulators, exemption registration authorities and exemption authorities: general

**62.**—(1) An appropriate authority may give directions to a regulator, exemption registration authority or exemption authority of a general or specific character with respect to the carrying out of its functions under these Regulations.

(2) Without prejudice to the generality of the power in paragraph (1), a direction may direct the regulator, exemption registration authority or exemption authority to exercise or not to exercise—

- (a) specified powers,
- (b) its powers in specified circumstances, or
- (c) its powers in a specified manner.

(3) Except in an emergency, an appropriate authority may give a direction to the appropriate agency under paragraph (1) only after consultation with the appropriate agency.

(4) The regulator, exemption registration authority or exemption authority must comply with a direction given to it under these Regulations.

#### Reference of applications to an appropriate authority

**63.**—(1) An appropriate authority may give directions to a regulator requiring that a particular application or class of application be referred to it for determination.

(2) The regulator must—

- (a) inform the applicant of the fact that the application is being referred to the appropriate authority, and
- (b) forward to the appropriate authority any representations made in respect of the application.

(3) When an application is referred to an appropriate authority, the appropriate authority—

- (a) may afford the applicant and the regulator an opportunity of appearing before and being heard by a person appointed by the appropriate authority, and
- (b) must do so in any case where a request is duly made by the applicant or the regulator to be so heard.



(4) A request under paragraph (3)(b) must be made in writing within 15 working days after the day on which the applicant is informed that the application is being referred to the appropriate authority.

(5) A hearing under paragraph (3) is subject to paragraphs 5(2) to (6) and 6 of Schedule 6 (except paragraph 5(3)(c)) as if it were a hearing under paragraph 5(1) of that Schedule with the following modifications—

- (a) “the appellant” is to be read as “the applicant”;
- (b) “the appeal” is to be read as “the application”.

(6) On determining an application referred to it under this regulation the appropriate authority must give to the regulator a direction as to whether the regulator is to grant the application and, if so, the conditions that are to be attached to the environmental permit.

(7) In this regulation, “application” means an application—

- (a) for the grant of an environmental permit, or
- (b) for the variation of an environmental permit.

#### **Directions to the appropriate agency: installations outside the United Kingdom**

**64.**—(1) This regulation applies where an appropriate authority receives information [<sup>F74</sup>from a member State] in relation to the operation of an installation outside the United Kingdom which is likely to have a significant negative effect on the environment of England or Wales.

(2) <sup>F75</sup>... The appropriate authority must direct the appropriate agency to take such steps as it considers appropriate to—

- (a) bring the information to the attention of persons likely to be affected by the operation of the installation, and
- (b) provide them with an opportunity to comment on the information.

[<sup>F76</sup>(3) In paragraph (1), “member State” has the meaning given in paragraph 10(4) of Schedule 5.]

#### **Textual Amendments**

**F74** Words in reg. 64(1) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(6)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

**F75** Words in reg. 64(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(6)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

**F76** Reg. 64(3) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(6)(c)**; 2020 c. 1, Sch. 5 para. 1(1)

#### **Guidance to regulators, exemption registration authorities and exemption authorities**

**65.**—(1) An appropriate authority may issue guidance to a regulator, exemption registration authority or exemption authority with respect to the exercise of its functions under these Regulations.

(2) In the exercise of those functions the regulator, exemption registration authority or exemption authority must have regard to the guidance.

#### **Fees and charges in relation to the exercise of regulator's functions by local authorities**

**66.**—(1) An appropriate authority may make, and from time to time revise, a scheme prescribing—

- (a) fees payable to a regulator in respect of applications—

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- (i) for the grant of an environmental permit,
  - (ii) for the variation of an environmental permit,
  - (iii) for the transfer of an environmental permit in whole or in part,
  - (iv) for the surrender of an environmental permit in whole or in part,
  - (b) fees payable to a regulator in respect of a regulator-initiated variation, and
  - (c) charges payable to a regulator in respect of the subsistence of an environmental permit.
- (2) A scheme may in particular—
- (a) prescribe specific fees and charges or the methods by which they are to be calculated,
  - (b) make different provision for different cases, including different provision in relation to different persons, circumstances or localities,
  - (c) subject to the requirements of these Regulations, provide for the time when, and the manner in which, payments required by the scheme are to be made, and
  - (d) make such incidental, supplementary and transitional provision as appears necessary or expedient to the appropriate authority.
- (3) In making or revising a scheme, so far as practicable the appropriate authority must ensure that the fees and charges payable are sufficient to cover expenditure by a regulator—
- (a) in exercising its functions under these Regulations;
  - (b) in making payment to any person who prepares guidance in relation to an installation or mobile plant that is—
    - (i) mentioned in regulation 32(5), or
    - (ii) specified in a direction under regulation 33;
  - (c) in making payment to the appropriate agency in relation to the exercise of the appropriate agency's functions under regulation 59.
- (4) A scheme must provide for the payment of sums by the regulator to the appropriate agency where those sums are related to expenditure by the appropriate agency under regulation 59 or in preparing guidance referred to in paragraph (3)(b).
- (5) If a regulator considers that an operator has failed to pay a charge specified in a scheme in respect of the subsistence of the operator's permit, the regulator may revoke or suspend the permit.
- (6) A revocation or suspension must be by way of notice served under regulation 22(3) or regulation 37.
- (7) In this regulation, “regulator” means a local authority on which functions are conferred by regulation 32 or by a direction under regulation 33.

### **Plans relating to emissions**

- 67.**—(1) Subject to paragraph (3), an appropriate authority may make plans for—
- (a) the setting of limits on the total amount, or the total amount in any period, of emissions from all or any description of source, or
  - (b) the allocation of quotas relating to such emissions.
- (2) If the appropriate authority allocates a quota in a plan made under paragraph (1) it may also make a scheme for the trading or other transfer of that quota.
- (3) This regulation does not apply to an emission plan or to the Transitional National Plan.
- (4) In this regulation—

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“emission” means the direct or indirect release of any substance from individual or diffuse sources into the air, water or land;

“emission plan” has the meaning given in the Large Combustion Plants (National Emission Reduction Plan) Regulations 2007 as those Regulations were in force on 31st March 2016<sup>M40</sup>;

“Transitional National Plan” has the meaning given in regulation 2 of the Large Combustion Plants (Transitional National Plan) Regulations 2015<sup>M41</sup>.

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**Marginal Citations**

**M40** [S.I. 2007/2325](#). The date of 31st March 2016 was the day before [S.I. 2007/2325](#) was revoked by [S.I. 2015/1973](#), with a saving provision in relation to where its provisions were referred to in connection with the definition of terms in other instruments.

**M41** [S.I. 2015/1973](#).

**Consultation in relation to works affecting flood and coastal erosion risks**

**68.**—(1) Before exercising a function relating to a flood risk activity which may affect a flood or coastal erosion risk (within the meaning of the Flood and Water Management Act 2010<sup>M42</sup>) in Wales, the Agency must consult the NRBW.

(2) Before exercising a function relating to a flood risk activity which may affect a flood or coastal erosion risk in England, the NRBW must consult the Agency.

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**Marginal Citations**

**M42** [2010 c. 29](#).

**Functions with respect to flood risk activities**

**69.** In exercising any function under these Regulations that relates to a flood risk activity, the appropriate agency must have due regard to the interests of fisheries, including sea fisheries.

## PART 7

### Miscellaneous provisions

#### CHAPTER 1

##### Interpretation

**Interpretation of this Part**

**70.** In this Part—

“existing” means in force at the relevant time;

“relevant time” means immediately before the coming into force of these Regulations.

## CHAPTER 2

### Death of sole operator

#### Death of sole operator

- 71.**—(1) This regulation applies if—
- (a) an environmental permit authorising the operation of a regulated facility is held by one individual (“A”), and
  - (b) A dies.
- (2) On the death of A, the environmental permit—
- (a) forms part of A's personal estate,
  - (b) vests in A's personal representatives,
  - (c) continues to have effect subject to the conditions that applied at the time of A's death, and
  - (d) must be read as if it contained the following condition—
- “As soon as is practicable after the death of the operator, the personal representatives of the operator must notify the regulator that the environmental permit has vested in them.”.
- (3) The environmental permit ceases to have effect 6 months after the day on which A dies, unless, by that time—
- (a) the permit has been transferred under regulation 21, or
  - (b) the regulator has received from A's personal representatives a duly-made application under regulation 21(1) for the transfer of the permit, and the application has not been withdrawn or finally determined.
- (4) If paragraph (3)(b) applies, the environmental permit continues in effect until the application—
- (a) is withdrawn, or
  - (b) on determination, is refused.

## CHAPTER 3

### Repeal, revocations, saving and amendments

#### Repeal

- 72.**—(1) The 1993 Act, except for the provisions referred to in paragraph (2), is repealed.
- (2) Those provisions are—
- (a) paragraph 5 of Schedule 4,
  - (b) section 49(1) so far as it relates to that paragraph, and
  - (c) section 51.

#### Revocations

- 73.**—(1) The instruments in Schedule 28 (revocations) are revoked to the extent specified.
- (2) In provisions specified as not revoked in Schedule 28, any references to provisions of the 2007 Regulations or the 2010 Regulations are to be read as references to the equivalent provisions of these Regulations.

## Saving

74.—(1) Despite the revocation of regulation 44 of the End-of-Life Vehicles Regulations 2003<sup>M43</sup> by the 2007 Regulations, any modification to a waste management licence that continued in effect under the 2007 Regulations and had effect at the relevant time continues to have effect under these Regulations.

(2) In paragraph (1), “waste management licence” means a licence granted under section 35 of the 1990 Act.

### Marginal Citations

**M43** S.I. 2003/2635, amended by S.I. 2007/3538; there are other amending instruments but none is relevant.

## Consequential amendments

75. Schedule 29 (consequential amendments) has effect.

## Amendment of the Transfrontier Shipment of Waste Regulations 2007

76. For regulation 16 of the Transfrontier Shipment of Waste Regulations 2007<sup>M44</sup>, substitute—

### “The Waste (England and Wales) Regulations 2011

16. The reference to a waste management plan in regulation 7 of the Waste (England and Wales) Regulations 2011<sup>M45</sup> includes a waste management plan made under this Part.”.

### Marginal Citations

**M44** S.I. 2007/1711, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

**M45** S.I. 2011/988, to which there are amendments not relevant to these Regulations.

## CHAPTER 4

### Transitional provisions

#### Transitional provisions: general

77.—(1) Anything being done under the 2010 Regulations at the relevant time is taken as being done under these Regulations.

(2) Anything done under the 2010 Regulations continues to have effect but is taken to have been done under these Regulations on the date on which it was done under the 2010 Regulations, including (but not limited to) the following—

- (a) an existing enforcement notice under the 2010 Regulations is taken to be an enforcement notice;
- (b) an existing suspension notice under the 2010 Regulations is taken to be a suspension notice;
- (c) an existing revocation notice under the 2010 Regulations is taken to be a revocation notice;
- (d) an existing landfill closure notice under the 2010 Regulations is taken to be a landfill closure notice;

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- (e) an existing prohibition notice under the 2010 Regulations is taken to be a prohibition notice;
  - (f) an application for the grant, variation, transfer or surrender of an environmental permit made under the 2010 Regulations that has not been determined by the relevant time is taken to be made under these Regulations;
  - (g) a decision made, or deemed to have been made, by a regulator or appropriate authority under the 2010 Regulations is taken to be made under these Regulations;
  - (h) an existing direction given, or deemed to have been given, to a regulator by the appropriate authority under the 2010 Regulations is taken to be given under these Regulations;
  - (i) a notification given under the 2010 Regulations that has not taken effect by the relevant time is taken to be given under these Regulations;
  - (j) an appeal made under the 2010 Regulations that has not been determined by the relevant time is taken to be made under these Regulations, with the notice of appeal taken to be given on the date on which the appeal was made under the 2010 Regulations.
- (3) An environmental permit under the 2010 Regulations in force at the relevant time—
- (a) becomes an environmental permit authorising the operation of a regulated facility under these Regulations, with references to provisions of the 2007 Regulations or the 2010 Regulations taken to be references to the equivalent provisions of these Regulations, and
  - (b) has effect subject to any conditions that applied to it at the relevant time.
- (4) An appeal may be made under these Regulations against a notice mentioned in paragraph (2) (a) to (e) or a decision mentioned in paragraph (2)(g) if, by the relevant time, the time for making an appeal under the 2010 Regulations had not expired, with the applicable time limit for giving notice of appeal running from the date on which the notice was served, or the decision was made, under the 2010 Regulations.
- (5) Despite paragraphs (1) and (2), an exemption under paragraph 17 of Section 2 of Chapter 3 of Part 1 of Schedule 3 of the 2010 Regulations (crushing waste fluorescent tubes (T17)) ceases to have effect.

### **Public registers**

**78.**—(1) Any information that, at the relevant time, was contained in a public register maintained by a regulator under the 2010 Regulations, or was deemed to be information kept on that register, is taken to be information contained in the public register maintained by the regulator under these Regulations.

(2) Any information that, at the relevant time, was within a regulator's possession for the purposes of regulation 46 of the 2010 Regulations but was not entered on a public register under those Regulations is taken to be in the regulator's possession for the purposes of these Regulations and must be entered on the register as soon as reasonably practicable.

(3) Any information excluded from a public register pursuant to an existing direction under regulation 47(1) of the 2010 Regulations is taken to be notified under regulation 47(2) of these Regulations.

### **Site plans not required for existing permits etc.**

**79.** Regulation 14(4) does not apply in relation to a regulated facility to which, at the relevant time, regulation 70 of the 2010 Regulations applied.

## CHAPTER 5

### Review

#### Review: England

**80.**—(1) The Secretary of State, in relation to England, must from time to time—

- (a) carry out a review of the regulatory provisions in these Regulations, and
- (b) publish a report setting out the conclusions of the review.

(2) In carrying out a review of any regulatory provision which implements an obligation in any of the following Directives, the Secretary of State must have regard to how the obligation is implemented in other member States—

- (a) the Asbestos Directive,
  - (b) the Basic Safety Standards Directive,
  - (c) the Batteries Directive,
  - (d) the End-of-Life Vehicles Directive,
  - (e) the Energy Efficiency Directive,
  - (f) the Groundwater Directive,
  - <sup>F77</sup>(g) . . . . .
  - (h) the Industrial Emissions Directive,
  - (i) the Landfill Directive,
  - <sup>F78</sup>(ai) the Medium Combustion Plant Directive,]
  - (j) the Mining Waste Directive,
  - (k) PVR I,
  - (l) PVR II,
  - (m) the Waste Framework Directive,
  - (n) the Water Framework Directive, and
  - (o) the WEEE Directive.
- (3) The report must in particular—
- (a) set out the objectives intended to be achieved by the regulatory provisions,
  - (b) assess the extent to which those objectives are achieved,
  - (c) assess whether those objectives remain appropriate, and
  - (d) if those objectives remain appropriate, assess the extent to which they could be achieved in another way which involves less onerous regulatory provisions.
- (4) The first report under this regulation must be published before the end of December 2019.
- (5) Subsequent reports under this regulation must be published at intervals not exceeding 5 years.
- (6) In this regulation, “regulatory provisions” has the meaning given in section 32(4) of the Small Business, Enterprise and Employment Act 2015 <sup>M46</sup>.

#### Textual Amendments

**F77** Reg. 80(2)(g) omitted (2.5.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), regs. 1, 5

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**F78** Reg. 80(2)(ai) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **12**

**Marginal Citations**

**M46** [2015 c. 26](#).

Department for Environment, Food and Rural  
Affairs

*Thérèse Coffey*  
Parliamentary Under Secretary of State

One of the Welsh Ministers

*Lesley Griffiths*  
Cabinet Secretary for the Environment and Rural  
Affairs



## SCHEDULE 1

Regulation 2(1)

Activities, installations and mobile plant

### PART 1

Interpretation and application: general

#### Interpretation

1.—(1) In this Schedule—

“activity” means, subject to this Part, an activity listed in Part 2 of this Schedule;

“installation” means—

- (a) a stationary technical unit where one or more activities are carried on, and
- (b) any other location on the same site where any other directly associated activities are carried on,

and references to an installation include references to part of an installation;

“net rated thermal input” means the rate at which fuel can be burned at the maximum continuous rating of the appliance, multiplied by the net calorific value of the fuel and expressed as megawatts thermal.

(2) In sub-paragraph (1), “directly associated activity” means an operation which—

- (a) has a technical connection with the activity,
- (b) is carried on on the same site as the activity, and
- (c) could have an effect on pollution.

#### Activities falling within more than one Part description

2.—(1) Where, in Part 2 of this Schedule, an activity falls within a description in Part A(1) and a description in Part A(2), that activity must be regarded as falling only within that description which fits it most aptly.

(2) Where, in Part 2 of this Schedule, an activity falls within a description in Part A(1) and a description in Part B, that activity must be regarded as falling only within the description in Part A(1).

(3) Where, in Part 2 of this Schedule, an activity falls within a description in Part A(2) and a description in Part B, that activity must be regarded as falling only within the description in Part A(2).

#### Application of activities falling within Part 2

3. An activity is not to be taken to be an activity falling within Part 2 of this Schedule if it is—

- (a) carried on in a working museum to demonstrate an industrial activity of historic interest,
- (b) carried on for educational purposes in a school as defined in section 4(1) of the Education Act 1996 <sup>M47</sup>,
- (c) carried on at an installation, other than a waste incineration plant or a waste co-incineration plant, or by means of Part B mobile plant, where the installation or plant is used solely for research, development or testing of new products or processes,
- (d) the running on or within an aircraft, hovercraft, mechanically propelled road vehicle, railway locomotive or ship or other vessel of an engine which propels or provides electricity for it,

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- (e) the running of an engine in order to test it before it is installed or in the course of its development,
- (f) carried on as a domestic activity in connection with a private dwelling, or
- (g) carried on at a waste incineration plant or a waste co-incineration plant used for research, development and testing in order to improve the incineration process and which treats less than 50 tonnes of waste per year.

#### Marginal Citations

**M47** 1996 c. 56; section 4(1) was substituted by section 51 of the [Education Act 1997 \(c. 44\)](#) and amended by Part 3 of Schedule 22 to the [Education Act 2002 \(c. 32\)](#), [section 95\(1\)](#) and (2) of the [Childcare Act 2006 \(c. 21\)](#), and paragraph 9(1) and (2)(a) of Schedule 13 to the [Education Act 2011 \(c. 21\)](#).

#### Application of thresholds for Part A(1) or Part A(2) activities

4. For the purposes of assessing whether an activity is above any of the thresholds for any Part A(1) activity or Part A(2) activity, where several activities falling under the same description of activity containing a threshold are operated in the same installation, the capacities of those activities must be added together.

#### Operation below thresholds: effect on the installation

5.—(1) Where an operator is authorised by an environmental permit to operate an installation at which Part A(1) activities, Part A(2) activities or Part B activities which are described in Part 2 of this Schedule by reference to a threshold (whether in terms of capacity or otherwise) are carried on, the installation does not cease to be a Part A(1) installation, a Part A(2) installation or a Part B installation, as the case may be, by virtue of the installation being operated below the relevant threshold unless the permit ceases to have effect in accordance with these Regulations.

#### Application of Part B activities: releases into the air

6.—(1) Subject to sub-paragraph (2), an activity is not to be taken to be a Part B activity within Part 2 of this Schedule if it cannot result in the release into the air of a substance listed in sub-paragraph (3) or there is no likelihood that it will result in the release into the air of any such substance except in a quantity which is so trivial that it is incapable of causing pollution or its capacity to cause pollution is insignificant.

(2) Sub-paragraph (1) does not apply to an activity which may give rise to an offensive smell noticeable outside the site where the activity is carried on.

(3) References to, or to the release into the air of, a substance listed in this paragraph are to any of the following substances—

- (a) oxides of sulphur and other sulphur compounds;
- (b) oxides of nitrogen and other nitrogen compounds;
- (c) oxides of carbon;
- (d) organic compounds and partial oxidation products;
- (e) metals, metalloids and their compounds;
- (f) asbestos (suspended particulate matter and fibres), glass fibres and mineral fibres;
- (g) halogens and their compounds;
- (h) phosphorus and its compounds;

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- (i) particulate matter.

### References to releases into water

7.—(1) References in Part 2 of this Schedule to a substance, or to the release into water of a substance, listed in this sub-paragraph or to its release in a quantity which, in any 12-month period, is greater than the background quantity by an amount specified in this sub-paragraph are references to the following substances and amounts—

**Table**

<i>Substance</i>	<i>Amount greater than the background quantity (in grams) in any 12-month period</i>
Mercury and its compounds	200 (expressed as metal)
Cadmium and its compounds	1,000 (expressed as metal)
All isomers of hexachlorocyclohexane	20
All isomers of DDT	5
Pentachlorophenol and its compounds	350 (expressed as PCP)
Hexachlorobenzene	5
Hexachlorobutadiene	20
Aldrin	2
Dieldrin	2
Endrin	1
Polychlorinated Biphenyls	1
Dichlorvos	0.2
1, 2-Dichloroethane	2,000
All isomers of trichlorobenzene	75
Atrazine	350 <sup>1</sup>
Simazine	350 <sup>1</sup>
Tributyltin compounds	4 (expressed as TBT)
Triphenyltin compounds	4 (expressed as TPT)
Trifluralin	20
Fenitrothion	2
Azinphos-methyl	2
Malathion	2
Endosulfan	0.5

<sup>1</sup> Where both Atrazine and Simazine are released, the figure for both substances in aggregate is 350 grams.

(2) In sub-paragraph (1), “background quantity” means, in relation to the release of a substance resulting from an activity, such quantity of that substance as is present in—

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- (a) water supplied to the site where the activity is carried on,
- (b) water abstracted for use in the activity, and
- (c) precipitation onto the site on which the activity is carried on.

### References to certain substances

8.—(1) References in Part 2 of this Schedule to a substance listed in this paragraph are to any of the following substances—

- (a) alkali metals and their oxides and alkaline earth metals and their oxides;
- (b) organic solvents;
- (c) azides;
- (d) halogens and their covalent compounds;
- (e) metal carbonyls;
- (f) organo-metallic compounds;
- (g) oxidising agents;
- (h) polychlorinated dibenzofuran and any congener thereof;
- (i) polychlorinated dibenzo-p-dioxin and any congener thereof;
- (j) polyhalogenated biphenyls, terphenyls and naphthalenes;
- (k) phosphorus;
- (l) pesticides.

(2) In sub-paragraph (1), “pesticide” means any chemical substance or preparation prepared or used for destroying any pest, including those used for—

- (a) protecting plants or wood or other plant products from harmful organisms,
- (b) regulating the growth of plants,
- (c) giving protection against harmful creatures or rendering such creatures harmless,
- (d) controlling organisms with harmful or unwanted effects on water systems, buildings or other structures, or on manufactured products, or
- (e) protecting animals against ectoparasites.

## PART 2

### Activities

#### CHAPTER 1

##### Energy activities

#### SECTION 1.1

##### Combustion activities

### Part A(1)

- (a) Burning any fuel in an appliance with a rated thermal input of 50 or more megawatts.

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### Interpretation and application of Part A(1)

1. For the purpose of Part A(1) of this Section, where two or more appliances with an aggregate rated thermal input of 50 or more megawatts are operated on the same site by the same operator, those appliances must be treated as a single appliance with a rated thermal input of 50 or more megawatts.

2. Nothing in this Part of this Section applies to burning fuels in an appliance installed on an offshore platform situated on, above or below those parts of the sea adjacent to England and Wales from the low water mark to the seaward baseline of the United Kingdom territorial sea.

3. In paragraph 2, “offshore platform” means any fixed or floating structure which—
- (a) is used for the purposes of or in connection with the production of petroleum, and
  - (b) in the case of a floating structure, is maintained on a station during the course of production,

but does not include any structure where the principal purpose of the use of the structure is the establishment of the existence of petroleum or the appraisal of its characteristics, quality or quantity or the extent of any reservoir in which it occurs.

4. In paragraph 3, “petroleum” includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.

5. Nothing in this Part of this Section applies to burning fuels in an appliance installed on a gas storage or unloading platform as defined in regulation 2 of the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013 <sup>M48</sup>.

### Part B

Unless falling within Part A(1) of this Section—

- (a) Burning any fuel in—
  - (i) a boiler,
  - (ii) a furnace,
  - (iii) a gas turbine, or
  - (iv) a compression ignition engine,with a net rated thermal input of 20 or more megawatts, but a rated thermal input of less than 50 megawatts.
- (b) Burning any waste oil in an appliance with a rated thermal input of less than 3 megawatts.

### Interpretation and application of Part B

#### Marginal Citations

M48 [S.I. 2013/971](#).

1. Part B does not apply to any activity falling within Part A(1) of Section 5.1.
2. For the purpose of paragraph (a) of Part B of this Section, where two or more appliances with an aggregate net rated thermal input of 20 or more megawatts are operated on the same site by the same operator, those appliances must be treated as a single appliance with a net rated thermal input of 20 or more megawatts.

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## SECTION 1.2

### *Gasification, liquefaction and refining activities*

#### **Part A(1)**

- (a) Refining gas where this is likely to involve the use of 1,000 or more tonnes of gas in any 12-month period.
- (b) Operating coke ovens.
- (c) Gasification or liquefaction of—
  - (i) coal, or
  - (ii) other fuels in installations with a total rated thermal input of 20 or more megawatts.
- (d) Refining mineral oils.
- (e) The loading, unloading, handling or storage of, or the physical, chemical or thermal treatment of—
  - (i) crude oil;
  - (ii) stabilised crude petroleum.
- (f) Activities involving the pyrolysis, carbonisation, distillation, partial oxidation or other heat treatment of—
  - (i) coal (other than the drying of coal),
  - (ii) lignite,
  - (iii) oil,
  - (iv) other carbonaceous material, or
  - (v) mixtures of any of these,otherwise than with a view to making charcoal.
- (g) Activities involving the liquefaction or gasification of other carbonaceous material.

#### **Interpretation and application of Part A(1)**

1. Part A(1)(f) does not include—
  - (a) the use of any substance as a fuel;
  - (b) the incineration in a waste incineration plant or waste co-incineration plant of any substance as a waste;
  - (c) any activity for the treatment of sewage or sewage sludge;
  - (d) the anaerobic digestion of biodegradable material, whether or not containing or comprising waste.
2. In Part A(1)(f), the heat treatment of oil, other than distillation, does not include the heat treatment of waste oil or waste emulsions containing oil in order to recover the oil from aqueous emulsions.
3. In Part A(1), “carbonaceous material” includes such materials as charcoal, coke, peat, rubber and wood, but does not include wood which has not been chemically treated or sewage.
4. In paragraph (1)(d), “anaerobic digestion” means the mesophilic and thermophilic biological decomposition and stabilisation of biodegradable materials which—
  - (a) is carried on under controlled anaerobic conditions,

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- (b) produces a methane-rich gas mixture, and
- (c) results in stable sanitised material that can be applied to land for the benefit of agriculture or to improve the soil structure or nutrients in land.

#### **Part A(2)**

- (a) Refining gas where this activity does not fall within Part A(1)(a) of this Section.

#### **Part B**

- (a) Blending odorant for use with natural gas or liquefied petroleum gas.
- (b) The storage of petrol in stationary storage tanks at a terminal, or the loading or unloading at a terminal of petrol into or from road tankers, rail tankers or inland waterway vessels.
- (c) The unloading of petrol into stationary storage tanks at a service station, if the total quantity of petrol unloaded into such tanks at the service station in any 12-month period is likely to be 500m<sup>3</sup> or more.
- (d) Motor vehicle refuelling activities at an existing service station after the prescribed date, if the throughput of petrol at that service station in any 12-month period is or is likely to be in excess of 3,000m<sup>3</sup>.
- (e) Motor vehicle refuelling activities at a new service station, if the throughput of petrol at that service station in any 12-month period is, or is intended to be in excess of 500m<sup>3</sup>.
- (f) Motor vehicle refuelling activities at a new service station if the throughput of petrol at that service station in any 12-month period is, or is intended to be in excess of 100m<sup>3</sup> and it is situated under permanent living quarters or working areas.

#### **Interpretation of Part B**

##### **1. In Part B—**

“existing service station” means a service station—

- (a) which was put into operation, or
- (b) for which planning permission under the Town and Country Planning Act 1990<sup>M49</sup> was granted,

before 1st January 2010;

“inland waterway vessel” means a vessel, other than a sea-going vessel, having a total dead weight of 15 or more tonnes;

“new service station” means—

- (a) a service station for which planning permission under the Town and Country Planning Act 1990 was granted on or after 1st January 2010 and—
  - (i) in relation to paragraph (e) of Part B, it is put into operation on or after 1st January 2010;
  - (ii) in relation to paragraph (f) of Part B, it is put into operation on or after 1st January 2012;
- (b) any existing service station which, on or after 1st January 2012, undergoes a major refurbishment, which has the same meaning as in PVR II;

“petrol” means any petroleum derivative (other than liquefied petroleum gas), with or without additives, having a Reid vapour pressure of 27.6 or more kilopascals, which is intended for use as a fuel for motor vehicles;

“prescribed date” means 31st December 2011 if the throughput is in excess of 3,500m<sup>3</sup> and 31st December 2018 if the throughput is in excess of 3,000m<sup>3</sup>;

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“service station” means any premises where petrol is dispensed to motor vehicle fuel tanks from stationary storage tanks but does not include any service station exclusively used in association with the construction and delivery of new motor vehicles;

“terminal” means any premises which are used for the storage and loading of petrol into road tankers, rail tankers or inland waterway vessels.

#### Marginal Citations

M49 1990 c. 8.

2. Any other expressions used in Part B which, in relation to paragraphs (b) and (c), are also used in PVR I or, in relation to paragraphs (d) to (f), are also used in PVR II, have the same meaning as in those Directives.

## CHAPTER 2

### Production and processing of metals

#### SECTION 2.1

##### *Ferrous metals*

#### Interpretation of Section 2.1

1. In this Section, “ferrous alloy” means an alloy of which iron is the largest constituent, or equal to the largest constituent, by weight, whether or not that alloy also has a non-ferrous metal content greater than any percentage specified in Section 2.2.

#### Part A(1)

- (a) Roasting or sintering metal ore, including sulphide ore, or any mixture of iron ore with or without other materials.
- (b) Producing, melting or refining iron or steel or any ferrous alloy, including continuous casting, except where the only furnaces used are—
  - (i) electric arc furnaces with a designed holding capacity of less than 7 tonnes, or
  - (ii) cupola, crucible, reverberatory, rotary, induction, vacuum, electro-slag or resistance furnaces.
- (c) Processing ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per hour.
- (d) Loading, unloading or otherwise handling or storing more than 500,000 tonnes in total in any 12-month period of iron ore, except in the course of mining operations, or burnt pyrites.

#### Part A(2)

- (a) Unless falling within Part A(1)(b) of this Section, producing pig iron or steel, including continuous casting, in a plant with a production capacity of more than 2.5 tonnes per hour.
- (b) Operating hammers in a forge, the energy of which is more than 50 kilojoules per hammer, where the calorific power used is more than 20 megawatts.
- (c) Applying protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour.



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- (d) Casting ferrous metal at a foundry with a production capacity of more than 20 tonnes per day.

## **Part B**

- (a) Unless falling within Part A(1)(b) of this Section, producing pig iron or steel, including continuous casting, in a plant with a production capacity of 2.5 or less tonnes per hour.
- (b) Unless falling within Part A(2)(a) or (d) of this Section, producing, melting or refining iron or steel or any ferrous alloy (other than producing pig iron or steel, including continuous casting) using—
  - (i) one or more electric arc furnaces, none of which has a designed holding capacity of 7 or more tonnes, or
  - (ii) a cupola, crucible, reverberatory, rotary, induction, vacuum, electro-slag or resistance furnace.
- (c) Desulphurising iron, steel or any ferrous alloy.
- (d) Heating iron, steel or any ferrous alloy (whether in a furnace or other appliance) to remove grease, oil or any other non-metallic contaminant (including such operations as the removal by heat of plastic or rubber covering from scrap cable), unless—
  - (i) it is carried on in one or more furnaces or other appliances the primary combustion chambers of which have in aggregate a rated thermal input of less than 0.2 megawatts,
  - (ii) it does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant, and
  - (iii) it is not related to any other activity falling within this Part of this Section.
- (e) Unless falling within Part A(1) or Part A(2) of this Section, casting iron, steel or any ferrous alloy from deliveries of 50 or more tonnes of molten metal.

## *SECTION 2.2*

### *Non-ferrous metals*

#### **Interpretation and application of Section 2.2**

1. Part A(1) and Part B do not apply to hand soldering, flow soldering or wave soldering.

#### **Part A(1)**

- (a) Unless falling within Part A(2) of this Section, producing non-ferrous metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic activities.
- (b) Melting, including making alloys of, non-ferrous metals, including recovered products and the operation of non-ferrous metal foundries where—
  - (i) the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals, and
  - (ii) any furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes.
- (c) Producing, melting or recovering (whether by chemical means or by electrolysis or by the use of heat) cadmium or mercury or any alloy containing more than 0.05 per cent by weight of either of those metals or both in aggregate.

#### **Part A(2)**

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- (a) Melting, including making alloys of, non-ferrous metals, including recovered products and operating of non-ferrous metal foundries where the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals, and—
  - (i) no furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes, or
  - (ii) the plant uses a vacuum furnace of any design holding capacity.

#### **Part B**

- (a) Melting, including making alloys of, non-ferrous metals (other than tin or any alloy which in molten form contains 50 per cent or more by weight of tin), including recovered products (such as refining or foundry casting) in plant with a melting capacity of 4 tonnes or less per day for lead or cadmium or 20 tonnes or less per day for all other metals.
- (b) Heating in a furnace or any other appliance any non-ferrous metal or non-ferrous metal alloy for the purpose of removing grease, oil or any other non-metallic contaminant, including such operations as the removal by heat of plastic or rubber covering from scrap cable, if not related to another activity described in this Part of this Section, unless—
  - (i) it involves the use of one or more furnaces or other appliances the primary combustion chambers of which have in aggregate a net rated thermal input of less than 0.2 megawatts, and
  - (ii) it does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant.
- (c) Melting zinc or a zinc alloy in conjunction with a galvanising activity at a rate of 20 or less tonnes per day.
- (d) Melting zinc, aluminium or magnesium or an alloy of one or more of these metals in conjunction with a die-casting activity at a rate of 20 or less tonnes per day.
- (e) Unless falling within Part A(1) or Part A(2) of this Section, the separation of copper, aluminium, magnesium or zinc from mixed scrap by differential melting.

#### **Interpretation and application of Part B**

1. When determining the extent of an installation carrying on an activity within Part B(e), any location where the associated storage or handling of scrap which is to be heated as part of that activity is carried on, other than a location where scrap is loaded into a furnace, is to be ignored.

2. In Part B, “non-ferrous metal alloy” means an alloy which is not a ferrous alloy, as defined in Section 2.1.

### *SECTION 2.3*

#### *Surface treating metals and plastic materials*

##### **Part A(1)**

- (a) Unless falling within Part A(2) of this Section, surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m<sup>3</sup>.

##### **Part A(2)**

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- (a) Surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m<sup>3</sup> and where the activity is carried on at the same installation as one or more activities falling within—
  - (i) Part A(2) or Part B of Section 2.1,
  - (ii) Part A(2) or Part B of Section 2.2, or
  - (iii) Part A(2) or Part B of Section 6.4.

#### **Part B**

- (a) Any process for the surface treatment of metal which is likely to result in the release into air of any acid-forming oxide of nitrogen and which does not fall within Part A(1) or Part A(2) of this Section.

### CHAPTER 3

#### Mineral industries

#### SECTION 3.1

##### *Production of cement and lime*

#### **Part A(1)**

- (a) Producing cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day.
- (b) Producing lime or magnesium oxide in kilns with a production capacity of more than 50 tonnes per day.

#### **Part A(2)**

- (a) Grinding cement clinker.

#### **Part B**

- (a) Storing, loading or unloading cement or cement clinker in bulk prior to further transportation in bulk.
- (b) Blending cement in bulk or using cement in bulk other than at a construction site, including the bagging of cement and cement mixtures, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products.
- (c) Slaking lime for the purpose of making calcium hydroxide or calcium magnesium hydroxide.
- (d) Producing lime or magnesium oxide where the activity does not involve the heating of more than 50 tonnes per day of calcium carbonate or calcium magnesium carbonate or both in aggregate.

#### SECTION 3.2

##### *Activities involving asbestos*

#### **Interpretation of Section 3.2**

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1. In this Section “asbestos” means any of the following fibrous silicates: actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite.

**Part A(1)**

- (a) Producing asbestos or manufacturing products based on or containing asbestos.
- (b) Stripping asbestos from railway vehicles except—
  - (i) in the course of the repair or maintenance of the vehicle,
  - (ii) in the course of recovery operations following an accident, or
  - (iii) where the asbestos is permanently bonded in cement or in any other material (including plastic, rubber or resin).

**Part B**

- (a) Unless related to an activity falling within Part A(1) of this Section, the industrial finishing of—
  - (i) asbestos cement,
  - (ii) asbestos cement products,
  - (iii) asbestos fillers,
  - (iv) asbestos filters,
  - (v) asbestos floor coverings,
  - (vi) asbestos friction products,
  - (vii) asbestos insulating board,
  - (viii) asbestos jointing, packaging or reinforcement material,
  - (ix) asbestos packing,
  - (x) asbestos paper or card, or
  - (xi) asbestos textiles.

*SECTION 3.3*

*Manufacturing glass and glass fibre*

**Part A(1)**

- (a) Manufacturing glass fibre in plant with a melting capacity exceeding 20 tonnes per day.

**Part A(2)**

- (a) Manufacturing glass, unless falling within Part A(1) of this Section, where the melting capacity of the plant is more than 20 tonnes per day.

**Part B**

Unless falling within Part A(1) or Part A(2) of this Section—

- (a) Manufacturing glass at any location with the capacity to make 5,000 or more tonnes of glass in any 12-month period, and any activity involving the use of glass which is carried on at any such location in conjunction with its manufacture.

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- (b) Manufacturing glass where the use of lead or any lead compound is involved.
- (c) Manufacturing any glass product where lead or any lead compound has been used in the manufacture of the glass except—
  - (i) making products from lead glass blanks, or
  - (ii) melting, or mixing with another substance, glass manufactured elsewhere to produce articles such as ornaments or road paint.
- (d) Polishing or etching glass or glass products in the course of any manufacturing activity if—
  - (i) hydrofluoric acid is used, or
  - (ii) hydrogen fluoride may be released into the air.
- (e) Manufacturing glass frit or enamel frit and its use in any activity where that activity is related to its manufacture.

#### SECTION 3.4

##### *Production of other mineral fibres*

#### **Part A(1)**

- (a) Melting mineral substances including the production of mineral fibres in plants with a melting capacity exceeding 20 tonnes per day.

#### SECTION 3.5

##### *Other mineral activities*

#### **Part A(2)**

- (a) Manufacturing cellulose fibre reinforced calcium silicate board using unbleached pulp.

#### **Part B**

- (a) Unless falling within Part A(1) or Part A(2) of any Section, the crushing, grinding or other size reduction, other than the cutting of stone, or the grading, screening or heating of any designated mineral or mineral product except where the operation of the activity is unlikely to result in the release into the air of particulate matter.
- (b) Any of the following activities unless carried on at an exempt location—
  - (i) crushing, grinding or otherwise breaking up coal, coke or any other coal product;
  - (ii) screening, grading or mixing coal, coke or any other coal product;
  - (iii) loading or unloading petroleum coke, coal, coke or any other coal product except unloading on retail sale.
- (c) The crushing, grinding or other size reduction, with machinery designed for that purpose, of bricks, tiles or concrete.
- (d) Screening the product of any activity described in paragraph (c).
- (e) Coating road stone with tar or bitumen.
- (f) Loading, unloading or storing pulverised fuel ash in bulk prior to further transportation in bulk.
- (g) The fusion of calcined bauxite for the production of artificial corundum.

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## Interpretation and application of Part B

### 1. In Part B—

“coal” includes lignite;

“designated mineral or mineral product” means—

- (a) clay, sand or any other naturally occurring mineral other than coal;
- (b) metallurgical slag;
- (c) boiler or furnace ash produced from the burning of coal, coke or any other coal product;
- (d) gypsum which is a by-product of any activity;

“exempt location” means—

- (a) any premises used for the sale of petroleum coke, coal, coke or any coal product where the throughput of such substances at those premises in any 12-month period is in aggregate likely to be less than 10,000 tonnes, or
- (b) any premises to which petroleum coke, coal, coke or any coal product is supplied only for use there;

“retail sale” means sale to the final customer.

### 2. Part B does not apply to any activity carried on underground.

## SECTION 3.6

### *Ceramic production*

#### Part A(1)

- (a) Manufacturing ceramic products (including roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain) by firing in kilns, where—
  - (i) the kiln production capacity is more than 75 tonnes per day, or
  - (ii) the kiln capacity is more than 4m<sup>3</sup> and the setting density is more than 300kg/m<sup>3</sup>, and a reducing atmosphere is used other than for the purposes of colouration.

#### Part A(2)

- (a) Unless falling within Part A(1) of this Section, manufacturing ceramic products (including roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain) by firing in kilns, where—
  - (i) the kiln production capacity is more than 75 tonnes per day, or
  - (ii) the kiln capacity is more than 4m<sup>3</sup> and the setting density is more than 300kg/m<sup>3</sup>.

#### Part B

- (a) Unless falling within Part A(1) or A(2) of this Section, firing heavy clay goods or refractory materials (other than heavy clay goods) in a kiln.
- (b) Vapour glazing earthenware or clay with salts.

## Interpretation of Part B

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1. In Part B—

“clay” includes a blend of clay with ash, sand or other materials;

“refractory material” means material (such as fireclay, silica, magnesite, chrome-magnesite, sillimanite, sintered alumina, beryllia and boron nitride) which is able to withstand high temperatures and to function as a furnace lining or in other similar high temperature applications.

## CHAPTER 4

### The chemical industry

#### Interpretation of Chapter 4

1. In Part A(1) of the Sections of this Chapter, “producing” means the production on an industrial scale by chemical or biological processing of substances or groups of substances listed in the relevant Sections.

#### SECTION 4.1

##### Organic chemicals

#### Interpretation of Section 4.1

1. In this Section, “pre-formulated resin or pre-formulated gel coat” means any resin or gel coat which has been formulated before being introduced into polymerisation or co-polymerisation activity, whether or not the resin or gel coat contains a colour pigment, activator or catalyst.

#### Part A(1)

- (a) Producing organic chemicals such as—
- (i) hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
  - (ii) organic compounds containing oxygen (for example alcohols, aldehydes, ketones, carboxylic acids, esters, ethers, peroxides, phenols, epoxy resins);
  - (iii) organic compounds containing sulphur (for example sulphides, mercaptans, sulphonic acids, sulphonates, sulphates and sulphones and sulphur heterocyclics);
  - (iv) organic compounds containing nitrogen (for example amines, amides, nitrous-, nitro- or azo-compounds, nitrates, nitriles, nitrogen heterocyclics, cyanates, isocyanates, di-isocyanates and di-isocyanate prepolymers);
  - (v) organic compounds containing phosphorus (for example substituted phosphines and phosphate esters);
  - (vi) organic compounds containing halogens (for example halocarbons, halogenated aromatic compounds and acid halides);
  - (vii) organometallic compounds (for example lead alkyls, Grignard reagents and lithium alkyls);
  - (viii) plastic materials (for example polymers, synthetic fibres and cellulose-based fibres);
  - (ix) synthetic rubbers;
  - (x) dyes and pigments;
  - (xi) surface-active agents.

#### Part B

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- (a) Unless falling within Part A(1) of this Section, any activity where the carrying on of the activity by the person concerned at the location in question is likely to involve the use in any 12-month period of 5 or more tonnes of any di-isocyanate or of any partly polymerised di-isocyanate or, in aggregate, of both.
- (b) The flame bonding or cutting with heated wires of polyurethane foams or polyurethane elastomers.
- (c) Any activity for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbon, where the activity is likely to involve, in any 12-month period, the polymerisation or co-polymerisation of 100 or more tonnes of unsaturated hydrocarbon.
- (d) Unless falling within Part A(1) of this Section, any activity involving the use of toluene di-isocyanate or partly polymerised di-isocyanate if—
  - (i) less than 5 tonnes of toluene di-isocyanate monomer is likely to be used in any 12-month period, and
  - (ii) the activity may result in a release into the air which contains toluene di-isocyanate.

### *Organic chemicals*

#### **Interpretation of Section 4.1**

1. In this Section, “pre-formulated resin or pre-formulated gel coat” means any resin or gel coat which has been formulated before being introduced into polymerisation or co-polymerisation activity, whether or not the resin or gel coat contains a colour pigment, activator or catalyst.

#### **Part A(1)**

- (a) Producing organic chemicals such as—
  - (i) hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
  - (ii) organic compounds containing oxygen (for example alcohols, aldehydes, ketones, carboxylic acids, esters, ethers, peroxides, phenols, epoxy resins);
  - (iii) organic compounds containing sulphur (for example sulphides, mercaptans, sulphonic acids, sulphonates, sulphates and sulphones and sulphur heterocyclics);
  - (iv) organic compounds containing nitrogen (for example amines, amides, nitrous-, nitro- or azo-compounds, nitrates, nitriles, nitrogen heterocyclics, cyanates, isocyanates, di-isocyanates and di-isocyanate prepolymers);
  - (v) organic compounds containing phosphorus (for example substituted phosphines and phosphate esters);
  - (vi) organic compounds containing halogens (for example halocarbons, halogenated aromatic compounds and acid halides);
  - (vii) organometallic compounds (for example lead alkyls, Grignard reagents and lithium alkyls);
  - (viii) plastic materials (for example polymers, synthetic fibres and cellulose-based fibres);
  - (ix) synthetic rubbers;
  - (x) dyes and pigments;
  - (xi) surface-active agents.

#### **Part B**



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- (a) Unless falling within Part A(1) of this Section, any activity where the carrying on of the activity by the person concerned at the location in question is likely to involve the use in any 12-month period of 5 or more tonnes of any di-isocyanate or of any partly polymerised di-isocyanate or, in aggregate, of both.
- (b) The flame bonding or cutting with heated wires of polyurethane foams or polyurethane elastomers.
- (c) Any activity for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbon, where the activity is likely to involve, in any 12-month period, the polymerisation or co-polymerisation of 100 or more tonnes of unsaturated hydrocarbon.
- (d) Unless falling within Part A(1) of this Section, any activity involving the use of toluene di-isocyanate or partly polymerised di-isocyanate if—
  - (i) less than 5 tonnes of toluene di-isocyanate monomer is likely to be used in any 12-month period, and
  - (ii) the activity may result in a release into the air which contains toluene di-isocyanate.

## SECTION 4.2

### *Inorganic chemicals*

#### **Part A(1)**

- (a) Producing inorganic chemicals such as—
  - (i) gases (for example ammonia, hydrogen chloride, hydrogen fluoride, hydrogen cyanide, hydrogen sulphide, oxides of carbon, sulphur compounds, oxides of nitrogen, hydrogen, oxides of sulphur, phosgene);
  - (ii) acids (for example chromic acid, hydrofluoric acid, hydrochloric acid, hydrobromic acid, hydroiodic acid, phosphoric acid, nitric acid, sulphuric acid, oleum and chlorosulphonic acid);
  - (iii) bases (for example ammonium hydroxide, potassium hydroxide, sodium hydroxide);
  - (iv) salts (for example ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate, cupric acetate, ammonium phosphomolybdate);
  - (v) non-metals, metal oxides, metal carbonyls or other inorganic compounds (for example calcium carbide, silicon, silicon carbide, titanium dioxide);
  - (vi) halogens or interhalogen compounds comprising two or more of halogens, or any compound comprising one or more of those halogens and oxygen.
- (b) Unless falling within any other Section, any manufacturing activity which is likely to result in the release into the air of any hydrogen halide (other than the manufacture of glass or the coating, plating or surface treatment of metal) or which is likely to result in the release into the air or water of any halogen or any of the compounds mentioned in paragraph (a) (vi) (other than the treatment of water).
- (c) Unless falling within any other Section, any manufacturing activity (other than the application of a glaze or vitreous enamel) involving the use of, or the use or recovery of, any compound of any of the following elements—
  - (i) antimony,
  - (ii) arsenic,

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- (iii) beryllium,
- (iv) gallium,
- (v) indium,
- (vi) lead,
- (vii) palladium,
- (viii) platinum,
- (ix) selenium,
- (x) tellurium,
- (xi) thallium,

where the activity may result in the release into the air of any of those elements or compounds or the release into water of any substance listed in paragraph 7(1) of Part 1 of this Schedule.

- (d) Recovering any compound of cadmium or mercury.
- (e) Unless falling within any other Section, any manufacturing activity involving the use of mercury or cadmium or any compound of either element or which may result in the release into the air of either of those elements or their compounds.
- (f) Unless falling within any other Section, any activity (other than the combustion or incineration of carbonaceous material as defined in the Interpretation of Part A(1) of Section 1.2) which is likely to result in the release into the air of any acid-forming oxide of nitrogen.

#### SECTION 4.3

##### *Chemical fertiliser production*

#### **Part A(1)**

- (a) Producing (including any blending which is related to their production) phosphorus-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers).

#### SECTION 4.4

##### *Plant health products and biocides*

#### **Part A(1)**

- (a) Producing plant health products or biocides.

#### SECTION 4.5

##### *Pharmaceutical production*

#### **Part A(1)**

- (a) Producing pharmaceutical products.

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## SECTION 4.6

### *Explosives production*

#### **Part A(1)**

- (a) Producing explosives.

## SECTION 4.7

### *Manufacturing activities involving carbon disulphide or ammonia*

#### **Part A(1)**

- (a) Any activity for the manufacture of a chemical which may result in the release of ammonia into the air, other than an activity in which ammonia is only used as a refrigerant.

## SECTION 4.8

### *The storage of chemicals in bulk*

#### **Part B**

- (a) The storage in tanks, other than in tanks for the time being forming part of a powered vehicle, of any of the substances listed below, except where the total storage capacity of the tanks installed at the location in question in which the relevant substance may be stored is less than the figure specified below in relation to that substance—
  - (i) one or more acrylates, 20 tonnes (in aggregate);
  - (ii) acrylonitrile, 20 tonnes;
  - (iii) anhydrous ammonia, 100 tonnes;
  - (iv) anhydrous hydrogen fluoride, 1 tonne;
  - (v) toluene di-isocyanate, 20 tonnes;
  - (vi) vinyl chloride monomer, 20 tonnes;
  - (vii) ethylene, 8,000 tonnes.

## CHAPTER 5

### Waste management

## SECTION 5.1

### *Incineration and co-incineration of waste*

#### **Part A(1)**

- (a) The incineration of hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 10 tonnes per day.
- (b) The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour.
- (c) The incineration, other than incidentally in the course of burning landfill gas or solid or liquid waste, of any gaseous compound containing halogens.

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## Part B

- (a) The incineration in a small waste incineration plant with an aggregate capacity of 50kg or more per hour of the following waste—
  - (i) vegetable waste from agriculture or forestry;
  - (ii) vegetable waste from the food processing industry, if the heat generated is recovered;
  - (iii) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;
  - (iv) cork waste;
  - (v) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings;
  - (vi) animal carcasses.
- (b) The cremation of human remains.

## Application of Part B

1. When determining the extent of an installation carrying on an activity within Part B, any location of the following description is to be ignored: any location where the associated storage or handling of wastes and residues which are to be incinerated as part of that activity is carried on, other than a location where the associated storage or handling of animal remains intended for burning in an incinerator used wholly or mainly for the incineration of such remains or residues from the burning of such remains in such an incinerator is carried on.

### SECTION 5.2

#### *Disposal of waste by landfill*

## Part A(1)

- (a) The disposal of waste in a landfill—
  - (i) receiving more than 10 tonnes of waste in any day, or
  - (ii) with a total capacity of more than 25,000 tonnes,but excluding disposals in a landfill taking only inert waste.

### SECTION 5.3

#### *Disposal or recovery of hazardous waste*

## Part A(1)

- (a) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities—
  - (i) biological treatment;
  - (ii) physico-chemical treatment;
  - (iii) blending or mixing prior to submission to any of the other activities listed in this Section or in Section 5.1;

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- (iv) repackaging prior to submission to any of the other activities listed in this Section or in Section 5.1;
- (v) solvent reclamation or regeneration;
- (vi) recycling or reclamation of inorganic materials other than metals or metal compounds;
- (vii) regeneration of acids or bases;
- (viii) recovery of components used for pollution abatement;
- (ix) recovery of components from catalysts;
- (x) oil re-refining or other re-uses of oil;
- (xi) surface impoundment.

#### SECTION 5.4

*Disposal, recovery or a mix of disposal and recovery of non-hazardous waste*

#### Part A(1)

- (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by <sup>F79</sup>the Urban Waste Water Treatment (England and Wales) Regulations 1994]—
  - (i) biological treatment;
  - (ii) physico-chemical treatment;
  - (iii) pre-treatment waste for incineration or co-incineration;
  - (iv) treatment of slags and ashes;
  - (v) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.
- (b) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by <sup>F80</sup>the Urban Waste Water Treatment (England and Wales) Regulations 1994]—
  - (i) biological treatment;
  - (ii) pre-treatment of waste for incineration or co-incineration;
  - (iii) treatment of slags and ashes;
  - (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

#### Textual Amendments

**F79** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(i)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)

**F80** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(i)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)

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#### Textual Amendments

- F79** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(i)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)
- F80** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(i)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Interpretation of Part A(1)

1. In Part A(1), “anaerobic digestion” has the same meaning as in the Industrial Emissions Directive.

#### SECTION 5.5

##### *The production of fuel from waste*

#### Part A(1)

- (a) Making solid fuel (other than charcoal) from waste by any process involving the use of heat.

#### SECTION 5.6

##### *Temporary or underground storage of hazardous waste*

#### Part A(1)

- (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2, 5.3 and paragraph (b) of this Section, except—
- (i) temporary storage, pending collection, on the site where the waste is generated, or
  - (ii) activities falling within Section 5.2.
- (b) Underground storage of hazardous waste with a total capacity exceeding 50 tonnes.

#### SECTION 5.7

##### *Treatment of waste water*

#### Part A(1)

- (a) Independently operated treatment of waste water not covered by [<sup>F81</sup>the Urban Waste Water Treatment (England and Wales) Regulations 1994] and discharged by an installation carrying out any other Part A(1) or A(2) activity.

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**Textual Amendments**

**F81** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

**Textual Amendments**

**F81** Words in Sch. 1 Pt. 2 Ch. 5 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

CHAPTER 6

Other activities

SECTION 6.1

*Paper, pulp and board manufacturing activities*

**Part A(1)**

- (a) Producing, in industrial plant, pulp from timber or other fibrous materials.
- (b) Producing, in industrial plant, paper and board where the plant has a production capacity of more than 20 tonnes per day.

**Part A(2)**

- (a) Producing, in an industrial plant, one or more of the following wood-based panels with a production capacity exceeding 600m<sup>3</sup> per day: oriented strand board, particleboard or fibreboard.

SECTION 6.2

*Carbon activities*

**Part A(1)**

- (a) Producing carbon or hard-burnt coal or electro-graphite by means of incineration or graphitisation.

SECTION 6.3

*Tar and bitumen activities*

**Part A(1)**

- (a) The following activities—
  - (i) distilling tar or bitumen in connection with any process of manufacture, or
  - (ii) heating tar for the manufacture of electrodes or carbon-based refractory materials,

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where the activity is likely to involve the use in any 12-month period of 5 or more tonnes of tar or of bitumen or both in aggregate.

### **Part B**

- (a) Any activity not falling within Part A(1) of this Section or of Section 6.2 involving—
- (i) heating, but not distilling, tar or bitumen in connection with any manufacturing activity, or
  - (ii) oxidising bitumen by blowing air through it, at plant where no other activities described in any Section in this Schedule are carried on,
- where the carrying on of the activity is likely to involve the use in any 12-month period of 5 or more tonnes of tar or bitumen or both in aggregate.

### **Interpretation of Part B**

1. In Part B, “tar” and “bitumen” include pitch.

## *SECTION 6.4*

### *Coating activities, printing and textile treatments*

#### **Part A(1)**

- (a) Pre-treating (by operations such as washing, bleaching or mercerization) or dyeing fibres or textiles in plant with a treatment capacity of more than 10 tonnes per day.

#### **Part A(2)**

- (a) Unless falling within Part A(1) of this Section, surface treating substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, in plant with a consumption capacity of more than 150kg or more per hour than 200 tonnes per year.

#### **Part B**

- (a) Unless falling within Part A(1) or Part A(2) of this Section or Part A(2)(c) of Section 2.1, any process (other than for the re-painting or re-spraying of, or of parts of, aircraft or road or railway vehicles) for applying to a substrate, or drying or curing after such application, printing ink or paint or any other coating material as, or in the course of, a manufacturing activity, where the process may result in the release into the air of particulate matter or of any volatile organic compound and is likely to involve the use in any 12-month period of—
- (i) 20 or more tonnes of printing ink, paint or other coating material which is applied in solid form,
  - (ii) 20 or more tonnes of any metal coating which is sprayed on in molten form,
  - (iii) 25 or more tonnes of organic solvents in respect of any cold set web offset printing activity or any sheet fed offset litho printing activity, or
  - (iv) 5 or more tonnes of organic solvents in respect of any activity not mentioned in subparagraph (iii).



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- (b) Unless falling within Part A(2) of this Section, re-painting or re-spraying road vehicles or parts of them if the activity may result in the release into the air of particulate matter or of any volatile organic compound and the carrying on of the activity is likely to involve the use of 1 or more tonnes of organic solvents in any 12-month period.
- (c) Re-painting or re-spraying aircraft or railway vehicles or parts of them if the activity may result in the release into the air of particulate matter or of any volatile organic compound and the carrying on of the activity is likely to involve the use in any 12-month period of—
  - (i) 20 or more tonnes of any paint or other coating material which is applied in solid form,
  - (ii) 20 or more tonnes of any metal coatings which are sprayed on in molten form, or
  - (iii) 5 or more tonnes of organic solvents.

### Interpretation and application of Part B

1. In Part B—

“aircraft” includes gliders and missiles;

“coating material” means paint, printing ink, varnish, lacquer, dye, any metal oxide coating, any adhesive coating, any elastomer coating, any metal or plastic coating and any other coating material.

2. The amount of organic solvents used in an activity must be calculated as—

- (a) the total input of organic solvents into the process, including both solvents contained in coating materials and solvents used for cleaning or other purposes, less
- (b) any organic solvents that are removed from the process for re-use or for recovery for re-use.

3. When determining the extent of an installation carrying on an activity within Part B, any location where the associated cleaning of used storage drums prior to painting or their incidental handling in connection with such cleaning is carried on is to be ignored, unless that location forms part of a regulated facility at which a solvent emission activity is carried out.

### SECTION 6.5

#### *The manufacture of dyestuffs, printing ink and coating materials*

### Part B

(a) Unless falling within Part A(1) or Part A(2) of any other Section—

- (i) manufacturing or formulating printing ink or any other coating material containing, or involving the use of, an organic solvent, where the carrying on of the activity is likely to involve the use of 100 or more tonnes of organic solvents in any 12-month period;
- (ii) manufacturing any powder for use as a coating where the process uses lead chromate or triglycidyl isocyanurate and material where there is the capacity to produce 200 or more tonnes of such powder in any 12-month period.

### Interpretation of Part B

1. In Part B, “coating material” has the same meaning as in Section 6.4.

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2. The amount of organic solvents used in an activity must be calculated as—
  - (a) the total input of organic solvents into the process, including both solvents contained in coating materials and solvents for cleaning or other purposes, less
  - (b) any organic solvents, not contained in coating materials, that are removed from the process for re-use or for recovery for re-use.

## SECTION 6.6

### Timber activities

#### Part A(2)

- (a) Preservation of wood and wood products with chemicals with a production capacity exceeding 75m<sup>3</sup> per day other than exclusively treating against sapstain.

#### Part B

- (a) Unless falling within Part A(2) of Section 6.1, manufacturing products wholly or mainly of wood at any works if the activity involves a relevant activity and the throughput of the works in any 12-month period is likely to be more than—
  - (i) 10,000 cubic metres in the case of works at which wood is only sawed, or wood is sawed and subjected to excluded activities, or
  - (ii) 1,000 cubic metres in any other case.

#### Interpretation of Part B

1. In Part B and in this paragraph—

“excluded activity” means any relevant activity (other than sawing) which, ignoring any sawing carried on at the works, would be unlikely to result in the release into the air of any substance in paragraph 6(3) of Part 1 of this Schedule in a quantity capable of causing significant harm;

“relevant activity” means the sawing, drilling, sanding, shaping, turning, planing, curing or chemical treatment of wood;

“throughput” means the amount of wood which is subjected to a relevant activity, but where wood is subject to two or more relevant activities at the same works, the second and any subsequent activity is to be ignored;

“wood” includes any product consisting wholly or mainly of wood;

“works” includes a sawmill or any other premises where relevant activities are carried on.

## SECTION 6.7

### Activities involving rubber

#### Part A(2)

- (a) Manufacturing new tyres (but not remoulds or retreads) if this involves the use in any 12-month period of 50,000 or more tonnes of one or more of the following—
  - (i) natural rubber;

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- (ii) synthetic organic elastomers;
- (iii) other substances mixed with them.

## Part B

- (a) Unless falling within Part A(1) or Part A(2) of any Section, the mixing, milling or blending of—
  - (i) natural rubber, or
  - (ii) synthetic organic elastomers,if carbon black is used.
- (b) Any activity which converts the product of an activity falling within paragraph (a) into a finished product if related to an activity falling within that paragraph.

## SECTION 6.8

### *The treatment of animal and vegetable matter and food industries*

## Interpretation of Section 6.8

1.—(1) In this Section—

“animal” includes a bird or a fish;

“controlled waters” has the meaning given in section 104 of the 1991 Act;

“excluded activity” means—

- (a) any activity carried on on a farm or agricultural holding other than—
  - (i) the manufacture of goods for sale;
  - (ii) the production of compost for growing mushrooms;
- (b) the manufacture or preparation of food or drink for human consumption but excluding—
  - (i) the extraction, distillation or purification of animal or vegetable oil or fat otherwise than as an activity incidental to the cooking of food for human consumption;
  - (ii) any activity involving the use of green offal or the boiling of blood except the cooking of food (other than tripe) for human consumption;
  - (iii) the cooking of tripe for human consumption elsewhere than on premises on which it is to be consumed;
- (c) the fleshing, cleaning and drying of pelts of fur-bearing mammals;
- (d) any activity carried on in connection with the operation of a collection centre for animal by-products;
- (e) any activity for the manufacture of soap not falling within Part A(1) of Section 4.1;
- (f) the storage of vegetable matter not falling within any other Section;
- (g) the manufacture of starch;
- (h) the salting of hides or skins, unless related to any other activity listed in this Schedule;
- (i) any activity for composting animal or vegetable matter or a combination of both, except where that activity is carried on for the purposes of cultivating mushrooms;

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- (j) any activity for cleaning, and any related activity for drying or dressing, seeds, bulbs, corms or tubers (and “related activity” means an activity being carried on by the same person at the same site);
  - (k) the drying of grain or pulses;
  - (l) any activity for the production of cotton yarn from raw cotton or for the conversion of cotton yarn into cloth;
  - (m) the drying of green crops;
- “food” includes—
- (a) drink,
  - (b) articles and substances of no nutritional value which are used for human consumption, and
  - (c) articles and substances used as ingredients in the preparation of food.
- (2) In sub-paragraph (1)—
- “green crops” means alfalfa (Lucerne), clover, grass, perennial ryegrass, tall fescue and other similar crops;
- “green offal” means the stomach and intestines of any animal, other than poultry or fish, and their contents.

#### **Part A(1)**

- (a) Tanning hides and skins at a plant with a treatment capacity of more than 12 tonnes of finished products per day.
- (b) Slaughtering animals at a plant with a carcass production capacity of more than 50 tonnes per day.
- (c) Disposing of or recycling animal carcasses or animal waste, other than by rendering in a small waste incineration plant, at a plant with a treatment capacity exceeding 10 tonnes per day of animal carcasses or animal waste or both in aggregate.
- (d) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed (where the weight of the finished product excludes packaging)—
  - (i) only animal raw materials (other than milk only) with a finished product production capacity greater than 75 tonnes per day;
  - (ii) only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day or 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year;
  - (iii) animal and vegetable raw materials (other than milk only), both in combined and separate products, with a finished product production capacity in tonnes per day greater than—
    - (aa) 75 if A is equal to 10 or more, or
    - (bb)  $300 - (22.5 \times A)$  in any other case,
 where ‘A’ is the portion of animal material in percent of weight of the finished product production capacity.
- (e) Treating and processing milk, the quantity of milk received being more than 200 tonnes per day (average value on an annual basis).

#### **Part A(2)**

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- (a) Disposing of or recycling animal carcasses or animal waste by rendering at plant or in a small waste incineration plant, where the plant or small waste incineration plant has a treatment capacity exceeding 10 tonnes per day of animal carcasses or animal waste or both in aggregate.

#### Part B

- (a) Processing, storing or drying by the application of heat the whole or part of any dead animal or any vegetable matter (other than the treatment of effluent so as to permit its discharge into controlled waters or into a sewer unless the treatment involves the drying of any material with a view to its use as animal feedstuff) if the processing, storing or drying—
  - (i) does not fall within another Section, or Part A(1) or Part A(2) of this Section,
  - (ii) is not an excluded activity, and
  - (iii) may result in the release into the air of—
    - (aa) any substance listed in in paragraph 6(3) of Part 1 of this Schedule, or
    - (bb) any offensive smell noticeable outside the premises on which the activity is carried on.
- (b) Breeding maggots in any case where 5kg or more of animal matter, vegetable matter or both in aggregate, are introduced into the process in any week.

#### SECTION 6.9

##### *Intensive farming*

#### Part A(1)

- (a) Rearing poultry or pigs intensively in an installation with more than—
  - (i) 40,000 places for poultry,
  - (ii) 2,000 places for production pigs (over 30kg), or
  - (iii) 750 places for sows.

#### SECTION 6.10

##### *Carbon capture and storage*

#### Part A(1)

- (a) Capture of carbon dioxide streams from an installation for the purposes of geological storage pursuant to [<sup>F82</sup>Chapter 3 of Part 1 of the Energy Act 2008 and other EU-derived domestic legislation which transposed Directive 2009/31/EC on the geological storage of carbon dioxide in relation to England and Wales].

#### Textual Amendments

- F82** Words in Sch. 1 Pt. 2 Ch. 6 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

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### Textual Amendments

**F82** Words in Sch. 1 Pt. 2 Ch. 6 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(7)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

## [<sup>F83</sup>SCHEDULE 1A

Regulation 3

### Modification of the Directives

### Textual Amendments

**F83** Sch. 1A inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), reg. 1, **Sch.** (as amended by S.I. 2019/559, regs. 1(2), 3(3); S.I. 2019/1078, regs. 1, 3; S.I. 2020/1376, regs. 1(4), 4(2); S.I. 2020/1540, regs. 1(3), 10, 13(2)); 2020 c. 1, Sch. 5 para. 1(1)

### Modification of the Asbestos Directive

1.—(1) For the purposes of these Regulations, the Asbestos Directive is to be read in accordance with this paragraph.

(2) When interpreting the Asbestos Directive for the purposes of these Regulations—

- (a) an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part, except for “waste” which has the meaning given in Article 2(5) of the Asbestos Directive read in accordance with sub-paragraph (3);
- (b) the competent authority is the regulator;
- (c) a reference to Member States is to be read as a reference to the regulator.

(3) Article 2(5) is to be read as if for “Article 1 of Directive [75/442/EEC](#)” there were substituted “Article 3(1) of the Waste Framework Directive, as read with Articles 5 and 6 of that Directive”.

(4) Article 3 is to be read as if paragraph 2 were omitted.

(5) Article 5 is to be read as if, in the first paragraph, in point (a), in the first subparagraph, in the second indent, for “competent authorities of the Member States” there were substituted “regulator”.

(6) Article 6 is to be read as if—

- (a) after paragraph 1 there were inserted—

“**1A.** In paragraph 1, “regular intervals” means, for the purposes of a regulated facility to which Article 4 applies, intervals of not more than 6 months.”;

- (b) paragraph 3 were omitted.

(7) Article 8 is to be read as if, in the words before the first indent, the words from “Without” to “Accession,” were omitted.

(8) The Annex is to be read as if, in Part B—

- (a) in Chapter 1, in paragraph 1, in the second subparagraph—

- (i) in the third sentence, for “controlling authority” there were substituted “regulator”;
- (ii) in the fourth sentence, for “a Member State” there were substituted “the regulator”;

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- (b) in Chapter 2—
  - (i) in the first paragraph, “subject to the provisions of Article 6(3) of the Directive,” were omitted;
  - (ii) in the second paragraph, for the words from “using” to the end there were substituted “ in accordance with Article 7(6) of Directive 2009/148/EC of the European Parliament and of the Council on the protection of workers from the risks related to exposure to asbestos at work ”;
  - (iii) in the third paragraph—
    - (aa) in point 1, for “controlling authority” there were substituted “ regulator ”;
    - (bb) in point 8, for the words from “conform” to the end there were substituted “ be conducted in accordance with Article 7(6) of Directive 2009/148/EC ”.

### **Modification of the Basic Safety Standards Directive**

2.—(1) For the purposes of these Regulations, the Basic Safety Standards Directive is to be read in accordance with this paragraph.

(2) When interpreting the Basic Safety Standards Directive for the purposes of these Regulations, “radioactive waste” has the meaning given in paragraph 3 of Part 2 of Schedule 23.

(3) Article 4 is to be read as if—

- (a) in points (11), (34), (43), (47) and (57), for “competent authority” there were substituted “ regulator ”;
- (b) point (79) were omitted;
- (c) in point (86), for “competent authority” in both places it occurs substitute “ regulator ”.

(4) Article 12 is to be read as if, in paragraphs 1 and 2, for “Member States” there were substituted “ The appropriate authority ”.

(5) Article 30(4) is to be read as if—

- (a) in the first sentence, for “Member States” there were substituted “ The regulator ”;
- (b) in the third sentence for “Competent Authority” there were substituted “ regulator ”.

(6) Article 66 is to be read as if—

- (a) in paragraphs 1 and 2 , for “Member States” in each place it occurs there were substituted “ The regulator ”;
- (b) in paragraph 3, in the words before point (a), for “competent authority” there were substituted “ regulator ”.

(7) Articles 85 to 87 are to be read as if—

- (a) for “Member States” in each place it occurs there were substituted “ The regulator ”;
- (b) in Articles 85(3) and 86(4), for “competent authority” there were substituted “ regulator ”.

(8) Article 88 is to be read as if, in the words before point (a), for the words from “In addition” to “States” there were substituted “ The regulator ”.

(9) Article 89 is to be read as if—

- (a) in the first paragraph—
  - (i) in the words before point (a)—
    - (aa) for “Member States” there were substituted “ The regulator ”;
    - (bb) for “competent authority” there were substituted “ regulator ”;
  - (ii) in point (b), for “Member States” there were substituted “ the appropriate authority ”;

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- (b) in the second paragraph, for “competent authority” there were substituted “ regulator ”.
- (10) Article 90 is to be read as if—
  - (a) in the heading, for “competent authority” there were substituted “ regulator ”;
  - (b) in the first sentence, for “Member States shall ensure that the competent authority keeps” there were substituted “ The regulator must keep ”;
  - (c) in the third sentence, for “competent authority” there were substituted “ regulator ”.
- (11) Article 91 is to be read as if for “Member States” in both places it occurs there were substituted “ The regulator ”.
- (12) Annex 7 is to be read as if—
  - (a) in section 1, in the first sentence, for “competent authority” there were substituted “ regulator ”;
  - (b) in section 2—
    - (i) in points (c) and (d), “Community” were omitted;
    - (ii) in point (e)—
      - (aa) in the second sentence, for “Article 75” there were substituted “ regulation 7 of the Ionising Radiation (Basic Safety Standards) (Miscellaneous Provisions) Regulations 2018 ”;
      - (bb) in the third sentence, for “competent authority” there were substituted “ regulator ”;
  - (c) in section 3—
    - (i) in point (d), for “Member States” there were substituted “ the appropriate authority ”;
    - (ii) in point (e), in the first paragraph, in the fourth indent, in the third sentence, for “Member States” there were substituted “ The appropriate authority ”;
  - (d) in Table A Part 1, in the final paragraph, for “competent authority” there were substituted “ appropriate authority ”.
- (13) Annex 14 is to be read as if, in the form, in the note, for “Community” there were substituted “ United Kingdom ”.
- (14) Annex 15 is to be read as if—
  - (a) in point (b), for “Member States” there were substituted “ the regulator ”;
  - (b) in points (d), (e) and (g), for “competent authority” in each place it occurs there were substituted “ regulator ”.

### **Modification of the Batteries Directive**

**3.—(1)** For the purposes of these Regulations, the Batteries Directive is to be read in accordance with this paragraph.

(2) Article 2(2)(a) is to be read as if for “Member States' essential security interests” there were substituted “ the essential security interests of the United Kingdom ”.

(3) Article 3 is to be read as if—

- (a) in point (7), for “Article 1(1)(a) of Directive [2006/12/EC](#) ” there were substituted “ Article 3(1) of the Waste Framework Directive, as read with Articles 5 and 6 of that Directive ”;
- (b) in point (9), for “Annex IIA to Directive [2006/12/EC](#)” there were substituted “ Annex 1 to the Waste Framework Directive ”.



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## Modification of the End-of-Life Vehicles Directive

4.—(1) For the purposes of these Regulations, the End-of-Life Vehicles Directive is to be read in accordance with this paragraph.

(2) When interpreting the End-of-Life Vehicles Directive for the purposes of these Regulations—

- (a) an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part;
- (b) a reference to one or more member States in a provision imposing an obligation or conferring a discretion on a member State or member States is to be read as a reference to the appropriate authority, appropriate agency or local authority which, immediately before IP completion day, was responsible for the United Kingdom's compliance with that obligation or able to exercise that discretion so far as it related to England or Wales.

(3) Article 2 is to be read as if—

(a) for paragraph 1 there were substituted—

“1. ‘vehicle’ means any motor vehicle;

1A. ‘waste’ means waste within the meaning of Article 3(1) of the Waste Framework Directive, as read with Articles 5 and 6 of that Directive;”;

(b) in paragraph 2, “within the meaning of Article 1(a) of Directive [75/442/EEC](#)” were omitted;

(c) paragraphs 8, 9 and 11 were omitted.

(4) Article 4(2) is to be read as if points (b) and (c) were omitted.

(5) Article 6 is to be read as if—

(a) in paragraph 1, for “[Directive 2008/98/EC](#) of the European Parliament and of the Council” there were substituted “the Waste Framework Directive”;

(b) in paragraph 3, in the words before point (a), for “establishment or undertaking” there were substituted “operator”.

(6) In Annex 2, in the table, in table foot note (2a), for the words from “[Directive 2006/95/EC](#)” to the end there were substituted “the second subparagraph of Article 1 of [Directive 2014/35/EU](#) of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits ,and for these purposes Annex 2 to [Directive 2014/35/EU](#) is to be read as if for “Member States participate” there were substituted “United Kingdom participates””.

(7) In sub-paragraph (2)(b), “local authority” means—

(a) in England outside Greater London—

- (i) a district council,
- (ii) a county council, or
- (iii) the Council of the Isles of Scilly;

(b) in Greater London—

- (i) the council of a London borough,
- (ii) the Common Council of the City of London,
- (iii) the Sub-Treasurer of the Inner Temple, or
- (iv) the Under-Treasurer of the Middle Temple;

(c) in Wales—

- (i) a county council, or

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- (ii) a county borough council.

### **Modification of the Energy Efficiency Directive**

**5.—(1)** For the purposes of these Regulations, the Energy Efficiency Directive is to be read in accordance with this paragraph.

(2) Annex 1 is to be read as if—

(a) in Part 1—

- (i) in point (a)(i) and (ii), for “Member States” there were substituted “ the appropriate authority ”;
- (ii) in point (b), in the third paragraph—
  - (aa) “If Member States introduce” were omitted;
  - (bb) for the words from “, such default values” to the end there were substituted “ must be used if they have been published by the appropriate authority ”;
- (iii) in points (d) and (e), for “Member States” there were substituted “ The appropriate authority ”;

(b) in Part 2, the final paragraph were omitted.

(3) Annex 2 is to be read as if—

(a) in point (b), in the definition of “CHP E<sub>n</sub>”, the final sentence were omitted;

(b) in point (c)—

- (i) in the first paragraph, for “Member States may” there were substituted “ It is permissible to ”;
- (ii) in the second paragraph, in the definition of “E<sub>n</sub>”, the final sentence were omitted;

(c) in point (d)—

- (i) “Member States may use” were omitted;
- (ii) after “one year” there were inserted “ may be used ”;

(d) in point (f), in the third paragraph, point 4 were omitted.

(4) Annex 9 is to be read as if, in Part 2—

(a) the heading and the words before the first paragraph were omitted;

(b) in the seventh paragraph, “for the purposes of Article 14(5)” were omitted;

(c) the ninth and tenth paragraphs were omitted.

### **Modification of the Industrial Emissions Directive**

**6.—(1)** For the purposes of these Regulations, the Industrial Emissions Directive is to be read in accordance with this paragraph.

(2) When interpreting the Industrial Emissions Directive for the purposes of these Regulations—

(a) an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part, except for “installation” for the purposes of Schedules 7 and 14, and—

- (i) for the purposes of Schedule 7, “installation” means Part A installation;
- (ii) for the purposes of Schedule 14, “installation” means a stationary technical unit within which a solvent emission activity is carried out, and any other directly associated activities on the same site which have a technical connection with the

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- solvent emission activity and which could have an effect on emission of volatile organic compounds;
- (b) except in point 5 of Annex 4 to the Directive, a reference to “Member States” is to be read as a reference to the competent authority;
- (c) the competent authority is—
- (i) for the purposes of exercising a judgement as to whether there is an overriding need to maintain energy supplies under Articles 30(6) and 37, the appropriate authority;
- (ii) otherwise, the regulator.
- (3) Article 3 is to be read as if—
- (a) in point (1)—
- (i) for the purposes of Schedule 7 only, in the words before point (a), after “its compounds” there were inserted “ and any biological entity or micro-organism ”;
- (ii) in point (a), for the words from “Article 1” to the end there were substituted “ Article 4 of the Basic Safety Standards Directive ”;
- (b) points (2) to (4) were omitted;
- (c) in point (6), for “Union” there were substituted “ retained EU ”;
- (d) for points (7) and (8) there were substituted—
- “(7) ‘permit’ means environmental permit;
- (8) ‘general binding rule’—
- (i) for the purposes of Schedules 15 and 17 to the Environmental Permitting (England and Wales) Regulations 2016, means emission limit values or other conditions, at least at sector level, that are adopted with the intention of being used directly to set permit conditions;
- (ii) otherwise, means a standard rule published under regulation 26 of the Environmental Permitting (England and Wales) Regulations 2016;”;
- (e) in point (10)(b), for “Member State in question” there were substituted “ United Kingdom ”;
- (f) in point (11), after “Article 13” there were inserted “ as that Article had effect immediately before IP completion day ”;
- (g) in point (12), for “means a document” there were substituted “ except where Article 13(7) applies, means a document annexed to retained direct EU legislation made under Article 13(5) as that Article had effect immediately before IP completion day ”;
- (h) points (18) and (20) were omitted;
- (i) in point (23), for the words from “point 1 of Article 2” to the end there were substituted “ point 1 of the second subparagraph of Article 2 of Council Directive [2009/158/EC](#) on animal health conditions governing intra-Community trade in, and imports from third countries of, poultry and hatching eggs ; ”;
- (j) point (25) were omitted;
- (k) in point (36), for the words from “point 26” to the end there were substituted “ Article 2(26) of Directive [2009/72/EC](#) of the European Parliament and of the Council concerning common rules for the internal market in electricity ; ”;
- (l) points (37), (38), (40), (41) were omitted.
- (4) Article 5 is to be read as if—
- (a) in paragraph 1, “or Union” were omitted;

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- (b) in paragraph 3, a reference to a numbered Article of Directive [85/337/EEC](#) were a reference to the EU-derived domestic legislation which transposed the same numbered Article of Directive 2011/92/EU of the European Parliament and of the Council on the assessment of the effects of certain public and private projects on the environment in respect of England and Wales.
- (5) Article 7 is to be read as if, in the words before point (a), the words from “Directive [2004/35/EC](#)” to “damage” there were substituted “the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 and the Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009”.
- ( 5A) Article 9 is to be read as if—
- (a) in paragraph 2, for “Member States” there were substituted “ the competent authority ”;
  - (b) in paragraph 4, for the words from “to 3 shall not” to the end, substitute “and 2 and the references to Annex 1 to Directive [2003/87/EC](#) in both are to be read as if for “in a storage site permitted under Directive [2009/31/EC](#)” in each place in which those words occur in that Annex, there were substituted “ in a storage site permitted under Chapter 3 of Part 1 of the Energy Act 2008 or other domestic legislation which immediately before IP completion day implemented Directive [2009/31/EC](#) ”
- (6) Article 11(d) and (e) is to be read as if, for “Directive [2008/98/EC](#) ” there were substituted “ the Waste Framework Directive ”.
- (7) Article 12(2) is to be read as if—
- (a) for “Directive [85/337/EEC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive 2011/92/EU in respect of England and Wales ”;
  - (b) for “Directive [96/82/EC](#) ”there were substituted “ the Control of Major Accident Hazards Regulations 2015 ”.
- (8) Article 13 is to be read as if—
- (a) paragraphs 1 to 6 were omitted;
  - (b) in paragraph 7, for the words from “Pending” to “paragraph 5, the” there were substituted “ In the absence of a BAT conclusion, any relevant ”.
- (9) Article 14 is to be read as if—
- (a) in paragraph 4, the second sentence were omitted;
  - (b) in paragraph 7, for “the legislation” there were substituted “ retained EU law ”.
- (10) Article 15 is to be read as if—
- (a) in paragraph 3, in the words before point (a), “referred to in Article 13(5)” were omitted;
  - (b) in paragraph 4, the fifth subparagraph were omitted.
- (11) Article 21 is to be read as if—
- (a) in paragraph 1, for the words from “Member States” to “periodically reconsiders” there were substituted “ The competent authority must periodically reconsider ”;
  - (b) in paragraph 3—
    - (i) in the first subparagraph, in the words before point (a), for “decisions on BAT conclusions in accordance with Article 13(5)” there were substituted “ BAT conclusions ”;
    - (ii) in the second subparagraph, “in accordance with Article 13(5)” were omitted.
- (12) Article 22 is to be read as if—
- (a) in paragraph 1—

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- (i) for the words from “Directive [2000/60/EC](#)” to “deterioration” there were substituted “ the legislation listed in paragraph 1A ”;
- (ii) for “Union” there were substituted “ retained EU ”;
- (b) after paragraph 1 there were inserted—
  - “1A. The legislation referred to in paragraph 1 is—
    - (a) the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) in respect of England and Wales ;
    - (b) the Environmental Damage (Prevention and Remediation) (England) Regulations 2015;
    - (c) the Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009;
    - (d) Schedule 22 to the Environmental Permitting (England and Wales) Regulations 2016 and the other EU-derived domestic legislation which transposed Directive [2006/118/EC](#) in respect of England and Wales .”;
- (c) in paragraph 2—
  - (i) in the fourth subparagraph, for “Union” there were substituted “ retained EU ”;
  - (ii) the fifth subparagraph were omitted.
- (13) Article 23 is to be read as if—
  - (a) in paragraph 4—
    - (i) in the fourth subparagraph, point (c) were omitted;
    - (ii) the fifth subparagraph were omitted;
  - (b) in paragraph 6, in the second subparagraph, for the words from “Directive [2003/4/EC](#)” to “environmental information” there were substituted “ the Environmental Information Regulations 2004 ”.
- (14) Article 24(4) is to be read as if, for “Article 4(1) and (2) of Directive [2003/4/EC](#)” there were substituted “ the exceptions in Part 3 of the Environmental Information Regulations 2004 ”.
- (15) Article 30 is to be read as if—
  - (a) in paragraph 5 the second sub-paragraph were omitted;
  - (b) in paragraph 6, the third subparagraph were omitted.
- (16) Article 31 is to be read as if—
  - (a) in paragraph 1, the words from “and with prior validation” to the end were omitted;
  - (b) in paragraph 2, for “points 3.1 or” there were substituted “ point ”.
- (17) Article 32 is to be read as if—
  - (a) a reference to the plan or transitional national plan were a reference to the UK transitional plan prepared by the Secretary of State and submitted to the European Commission on 20th October 2015;
  - (b) in paragraph 2, in the second subparagraph, the words “, pursuant in particular to the requirements of Directives [2001/80/EC](#) and [2008/1/EC](#) ,” were omitted;
  - (c) in paragraph 3, the second subparagraph were omitted.
- (18) Article 33 is to be read as if—
  - (a) in paragraph 1—
    - (i) in the words before point (a)—

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- (aa) the reference to the transitional national plan were a reference to the UK transitional plan prepared by the Secretary of State and submitted to the European Commission on 20th October 2015;
  - (bb) “referred to in Article 32” were omitted;
  - (ii) at the end of point (b) there were inserted “and”;
  - (iii) in point (c), the words “, pursuant in particular to the requirements of Directives [2001/80/EC](#) and [2008/1/EC](#),” were omitted;
  - (iv) point (d) (and the “and” immediately preceding it) were omitted;
  - (b) in paragraph 2—
    - (i) for “Commission” in both places it occurs there were substituted “ appropriate authority ”;
    - (ii) in the first sentence, for “each Member State” substitute “ the regulator ”.
- (19) Articles 34(1) and 35(1)(d) are to be read as if the words “, pursuant in particular to the requirements of Directives [2001/80/EC](#) and [2008/1/EC](#),” were omitted.
- (20) Article 42(2)(a)(iii) is to be read as if, for the words from “Regulation (EC) No 1774/2002” to the end there were substituted “ Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption ”.
- (21) Article 44(d) is to be read as if “and Union” were omitted.
- (22) Article 45(1)(a) is to be read as if for “European Waste List established by” there were substituted “ List in ”.
- (23) Article 50(3) is to be read as if, in the second subparagraph, for the words from “Article 2(2)” to the end there were substituted “ regulation 2(1) of the Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007 ”.
- (24) Article 51 is to be read as if—
- (a) in paragraph 1, the second sentence were omitted;
  - (b) in paragraph 4—
    - (i) for “Commission” there were substituted “ appropriate authority ”;
    - (ii) the words from “as part” to the end were omitted.
- (25) Article 52 is to be read as if—
- (a) in paragraph 2, for “European Waste List established by” there were substituted “ List in ”;
  - (b) in paragraph 4(a), for “Directive [2008/98/EC](#)” there were substituted “ the Waste Framework Directive ”.
- (26) Article 55(2) is to be read as if, in the first sentence, for “report referred to in Article 72 shall include” there were substituted “ regulator must provide to the appropriate authority ”.
- (27) Article 59 is to be read as if—
- (a) in paragraph 1, the second subparagraph were omitted;
  - (b) in paragraph 4—
    - (i) for “Commission” there were substituted “ appropriate authority ”;
    - (ii) “in accordance with Article 72(2)” were omitted.
- (28) Article 65(3) is to be read as if for “restrictions laid down in Article 4(1) and (2) of Directive [2003/4/EC](#)” there were substituted “ exceptions in Part 3 of the Environmental Information Regulations 2004 ”.

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- (29) Annex 1 is to be read as if—
- (a) in the words before point 1, the second paragraph were omitted;
  - (b) in point 5.3—
    - (i) in point (a), in the words before point (i), for “Council Directive [91/271/EEC](#) of 21 May 1991 concerning urban waste-water treatment” there were substituted “ the Urban Waste Water Treatment (England and Wales) Regulations 1994 ”;
    - (ii) in point (b), in the words before point (i), for “Directive [91/271/EEC](#)” there were substituted “ the Urban Waste Water Treatment (England and Wales) Regulations 1994 ”;
  - (c) in point 5.4, the words from “, as defined” to “of waste” were omitted;
  - (d) in point 6.9, for “Directive [2009/31/EC](#)” there were substituted “ Chapter 3 of Part 1 of the Energy Act 2008 and other EU-derived domestic legislation which transposed Directive [2009/31/EC](#) on the geological storage of carbon dioxide in relation to England and Wales ”;
  - (e) in point 6.11, for “Directive [91/271/EEC](#)” there were substituted “ the Urban Waste Water Treatment (England and Wales) Regulations 1994 ”.
- (30) Annex 2 is to be read as if, in the Section headed “Water”, in paragraph 13, for “Directive [2000/60/EC](#)” there were substituted “ the Water Framework Directive ”.
- (31) Annex 4 is to be read as if—
- (a) in point 1(b), for the words from “consultations” to the end there were substituted “ a consultation in accordance with paragraph 10(2A)(a) of Schedule 5 to the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in point 2—
    - (i) in point (a) “or authorities” were omitted;
    - (ii) in point (b), for “Directive [2003/4/EC](#)” there were substituted “ the Environmental Information Regulations 2004 ”;
  - (c) in point 5, for “Member States” there were substituted “ appropriate authority ”.
- (32) Annex 6 is to be read as if—
- (a) in Part 4—
    - (i) in point 1, in the definition of “Vproc”, “Union or” were omitted;
    - (ii) point 3.1 were omitted;
  - (b) in Part 5, in entry 1 of the table, in the first column, after “defined in” there were inserted “ the third entry of Table 1 in ”;
  - (c) in Part 6, in point 2.1(c), after “furans” there were inserted “ and dioxin-like polychlorinated biphenyls and polycyclic aromatic hydrocarbons ”, but only in the case of particular plants where the regulator can demonstrate that emissions of those additional substances are, or are likely to be, significant.

### **Modification of the Landfill Directive**

7.—(1) For the purposes of these Regulations, the Landfill Directive is to be read in accordance with this paragraph.

- (2) When interpreting the Landfill Directive for the purposes of these Regulations—
- (a) an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part;
  - (b) “landfill permit” or “permit” means environmental permit;

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- (c) “nature protection zone” means any—
- (i) European site (which has the meaning given in regulation 8 of the Conservation of Habitats and Species Regulations 2017), or
  - (ii) site of special scientific interest (which has the meaning given in section 52(1) of the Wildlife and Countryside Act 1981 );
- (d) a reference to one or more member States in a provision imposing an obligation or conferring a discretion on a member State or member States is to be read as a reference to the appropriate authority, appropriate agency or local authority which, immediately before IP completion day, was responsible for the United Kingdom’s compliance with that obligation or able to exercise that discretion so far as it related to England or Wales;
- (e) the competent authority is the regulator.
- (3) Article 1 is to be read as if—
- (a) in paragraph 1, the words from “With a view” to “thereof,” were omitted;
  - (b) in paragraph 2, for “Directive 96/61/EC ”, in both places it occurs, there were substituted “ the Industrial Emissions Directive ”.
- (4) Article 2 is to be read as if—
- (a) for point (a) there were substituted—
    - “(a) the definitions of ‘municipal waste’, ‘waste producer’, ‘waste holder’, ‘waste management’, ‘separate collection’, ‘preparing for re-use’ and ‘recycling’ in the Waste Framework Directive apply, with references to ‘waste’ in those definitions being interpreted in accordance with the definition of ‘waste’ in Part 1 of the Environmental Permitting (England and Wales) Regulations 2016;”;
  - (b) points (l), (p) and (r) were omitted.
- (5) Article 3 is to be read as if—
- (a) in paragraph 2, in the words before the first indent, “Without prejudice to existing Community legislation,” were omitted;
  - (b) for paragraph 3 there were substituted—
 

“3. The management of extractive waste is excluded from the scope of this Directive where it falls within the scope of Schedule 20, or paragraph 8(a) or (b) of Schedule 22, to the Environmental Permitting (England and Wales) Regulations 2016.”.
- (6) Article 5(3) is to be read as if—
- (a) in point (b), for “Annex III to Directive 91/689/EEC ” there were substituted “ Annex 3 to the Waste Framework Directive ”;
  - (b) in point (c), for the words from “(property H9” to the end there were substituted “ by Annex 3 to the Waste Framework Directive ”;
  - (c) in point (d)—
    - (i) for “two years from the date laid down in Article 18(1)” there were substituted “ 16th July 2001 ”;
    - (ii) for “five years from the date laid down in Article 18(1)” there were substituted “ from 16th July 2004 ”.
  - (d) in point (f)—
    - (i) after “waste”, in the first place it occurs, there were inserted “paper, metal, plastic and glass”;
    - (ii) the words from “pursuant” to “Article 22 of that Directive” were omitted;



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- (ii) for “Article 4 of that Directive” there were substituted “Article 4 of the Waste Framework Directive”
- (7) In Article 6, point (a) is to be read as if—
  - (a) in the first paragraph, in the second sentence, for “may” there were substituted “does”;
  - (b) in the second paragraph, for the words from “of [Directive 2008/98/EC](#)” to the end, there were substituted “set out in Part 1 of Schedule 1 to the Waste (England and Wales) Regulations 2011, or any objectives in retained EU law relating to the increase of preparing for re-use and recycling”.
- (8) Article 7 is to be read as if—
  - (a) in the first subparagraph, in point (h)—
    - (i) the reference to Council Directive [85/337/EEC](#) of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment were a reference to the EU-derived domestic legislation which transposed Directive 2011/92/EU in respect of England and Wales;
    - (iii) the reference to Article 5 of Directive [85/337/EEC](#) were a reference to the EU-derived domestic legislation which transposed Article 5 of Directive 2011/92/EU in respect of England and Wales;
  - (b) in the second subparagraph, “and Community” were omitted.
- (9) Article 8 is to be read as if—
  - (a) in point (a)—
    - (i) in point (i), “without prejudice to Article 3(4) and (5),” were omitted;
    - (ii) in point (iv)—
      - (aa) in the first sentence, “issued under the provisions of this Directive” were omitted;
      - (bb) the final sentence were omitted;
  - (b) in point (b), for “Article 7 of Directive [75/442/EEC](#)” there were substituted “ regulation 7 of the Waste (England and Wales) Regulations 2011 ”.
- (10) Article 9 is to be read as if, in the words before point (a), the words from “Specifying” to “Directive [96/61/EC](#),” were omitted.
- (11) Article 10 is to be read as if for the words from “Council Directive [90/313/EEC](#) ” to “environment” there were substituted “ the Environmental Information Regulations 2004 ”.
- (12) Article 11(1) is to be read as if—
  - (a) in point (b)—
    - (i) in the first indent—
      - (aa) for “Article 5(3) of Directive [91/689/EEC](#)” there were substituted “ Article 19(2) of the Waste Framework Directive ”;
      - (bb) for “Council Regulation” to the end there were substituted “ Regulation [\(EC\) No 1013/2006](#) of the European Parliament and of the Council on shipments of waste ”;
    - (ii) in the third indent, “and Community” were omitted;
  - (b) in point (d), “without prejudice to the provisions of Regulation [\(EEC\) No 259/93](#),” were omitted.
- (13) Article 13(d) is to be read as if “Community or” were omitted.
- (14) Article 14 is to be read as if—

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- (a) in the words before point (a), for “within eight years after the date laid down in Article 18(1)” there were substituted “ by 16th July 2007 ”;
  - (b) in point (a), for the words from “with a period” to “Article 18(1)” there were substituted “ by 16th July 2000 ”;
  - (c) in point (c), for “within eight years after the date laid down in Article 18(1)” there were substituted “ by 16th July 2007 ”;
  - (d) in point (d)—
    - (i) in point (i), for “within one year after the date laid down in Article 18(1)” there were substituted “ by 16th July 2000 ”;
    - (ii) in point (ii), for “within three years after the date laid down in Article 18(1)” there were substituted “ by 16th July 2002 ”.
- (15) Annex 1 is to be read as if—
- (a) in Section 2, for the final sentence there were substituted “ The above provisions do not apply to inert landfills. ”;
  - (b) in Section 3.3, omit the second paragraph;
  - (c) in Section 3.4, for “Directive 80/68/EEC ” there were substituted “ the EU-derived domestic legislation which transposed Directive 2000/60/EC of the European Parliament and of the Council in respect of England and Wales ”;
  - (d) .....
- (16) Annex 2 is to be read as if—
- (a) Section 1 were omitted;
  - (b) in Section 2, in the second paragraph, the final sentence were omitted;
  - (c) in Section 4, in the fourth and fifth paragraphs, for “covered by Directive 91/689/EEC” there were substituted “ classified as hazardous waste ”;
  - (d) .....
- (17) Annex 3 is to be read as if—
- (a) in Section 2, in the table, in the first column, for “14.00 h CET” in both places it occurs there were substituted “1 p.m.”;
  - (b) in Section 3, in the fourth paragraph, in the table, in table note 7, the words from “, and will report” to the end were omitted.
- (18) In sub-paragraph (2)(d), “local authority” has the meaning given in paragraph 4(7).

**Modification of the Medium Combustion Plant Directive**

8.—(1) For the purposes of these Regulations, the Medium Combustion Plant Directive is to be read in accordance with this paragraph.

(2) When interpreting the Medium Combustion Plant Directive for the purposes of these Regulations—

- (a) except where defined in this paragraph, an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part;
- (b) the competent authority is the regulator;
- (c) “general binding rule” means a standard rule published under regulation 26;
- (d) a reference to “Member States” is to be read as a reference to the regulator;
- (e) “permit” means environmental permit;

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- (f) a reference to Directive 2010/75/EU is to be read as if it were a reference to the Industrial Emissions Directive.
- (3) Article 2 is to be read as if—
  - (a) in paragraph 3(b), for “Directive 97/68/EC of the European Parliament and of the Council” there were substituted “ Regulation (EU) 2016/1628 of the European Parliament and of the Council on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery ”;
  - (b) in paragraph 4, the second sentence were omitted.
- (4) Article 3 is to be read as if points (1), (5) and (17) were omitted.
- (5) Article 6 is to be read as if—
  - (a) in paragraph 1, the second subparagraph were omitted;
  - (b) paragraphs 8, 11 and 12 were omitted.
- (6) Article 7 is to be read as if—
  - (a) in paragraph 5(c), for “Article 6(8)” there were substituted “ paragraph 8(1) of Schedule 25A to the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in paragraph 7, in the first sentence, for “Article 8” there were substituted “ Article 8(2) and (3) ”.
- (7) Annex 1 is to be read as if, in point 7, for “Article 6(8)” there were substituted “ paragraph 8(1) of Schedule 25A to the Environmental Permitting (England and Wales) Regulations 2016 ”.
- (8) Annex 3 is to be read as if—
  - (a) in Part 1, in point 2, for “Article 6(8)” in each place it occurs there were substituted “ paragraph 8(1) of Schedule 25A to the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in Part 2, in point 3, for “Article 6(11) and Article 6(12)” there were substituted “ paragraph 11(2) and (4) of Schedule 25A to the Environmental Permitting (England and Wales) Regulations 2016 ”.

### **Modification of the Mining Waste Directive**

- 9.—(1) For the purposes of these Regulations, the Mining Waste Directive is to be read in accordance with this paragraph.
- (2) When interpreting the Mining Waste Directive for the purposes of these Regulations—
    - (a) except where defined in this paragraph, an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part;
    - (b) “permit” means an environmental permit;
    - (c) a reference to one or more member States in a provision imposing an obligation or conferring a discretion on a member State or member States is to be read as a reference to the appropriate authority, appropriate agency or local authority which, immediately before IP completion day, was responsible for the United Kingdom's compliance with that obligation or able to exercise that discretion so far as it related to England or Wales;
    - (d) the competent authority is the regulator.
  - (3) Article 2 is to be read as if—
    - (a) in paragraph 2(c), for “Directive 2000/60/EC” there were substituted “ the Water Framework Directive ”;
    - (b) in paragraph 3, the second and third subparagraphs were omitted;

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- (c) paragraph 4 were omitted.
- (4) Article 3 is to be read as if—
  - (a) points (1) and (2) were omitted;
  - (b) in point (4), for the words from “the national law” to the end there were substituted “national law”;
  - (c) in point (17), for “Directive [67/548/EEC](#) or Directive [1999/45/EC](#)” there were substituted “Regulation [\(EC\) No 1272/2008](#) of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures”;
  - (d) in point (18), for “Article 2(11) of Directive [96/61/EC](#)” there were substituted “Article 3(10) of the Industrial Emissions Directive”;
  - (e) in point (19), for “Directive [2000/60/EC](#)” there were substituted “the Water Framework Directive”;
  - (f) point (24) were omitted;
  - (g) in point (26), for the words from “the national law” to “operates” there were substituted “national law”;
  - (h) point (27) were omitted.
- (5) Article 5 is to be read as if—
  - (a) in paragraph 2(a)(iii) and (b), “at Community level” were omitted;
  - (b) in paragraph 3(g), for “Directive [2000/60/EC](#)” there were substituted “the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales”;
  - (c) in paragraph 5, “national or Community” were omitted.
- (6) Article 6 is to be read as if—
  - (a) in paragraph 1, for “Directive [96/82/EC](#)” there were substituted “the Control of Major Accident Hazards Regulations 2015”;
  - (b) in paragraph 2, the words from “Without prejudice” to “92/104/EEC,” were omitted.
- (7) Article 7 is to be read as if—
  - (a) in paragraph 1, in the second subparagraph, “national or Community” were omitted;
  - (b) in paragraph 2(e), a reference to Directive [85/337/EEC](#) were a reference to the EU-derived domestic legislation which transposed Directive 2011/92/EU in respect of England and Wales;
  - (c) in paragraph 3(b), for “Article 7 of Directive [75/442/EC](#)” there were substituted “regulation 7 of the Waste (England and Wales) Regulations 2011”;
  - (d) in paragraph 4, the third indent were omitted;
  - (e) in paragraph 5, “and Community” were omitted.
- (8) Article 8 is to be read as if—
  - (a) in paragraph 1(b), for the words from “between” to the end there were substituted “in accordance with paragraph 10(2A)(a) of Schedule 5 to the Environmental Permitting (England and Wales) Regulations 2016”;
  - (b) in paragraph 2(b), for the words from “provisions” to “environmental information” there were substituted “Environmental Information Regulations 2004”.
- (9) Article 10(2) is to be read as if for “Directive [1999/31/EC](#)” there were substituted “The Landfill Directive”.
- (10) Article 11(2)(a) is to be read as if—

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- (a) “Community or” were omitted;
  - (b) for “Directives [76/464/EEC](#) , [80/68/EEC](#) and [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”.
- (11) Article 12 is to be read as if—
- (a) in paragraph 4, “or Community” were omitted;
  - (b) in paragraph 5, in the words before point (a)—
    - (i) for “Community legislation” there were substituted “ retained EU law ”;
    - (ii) for “Directives [76/464/EEC](#), [80/68/EEC](#) and [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”.
- (12) Article 13 is to be read as if—
- (a) in paragraph 1, in the words before point (a)—
    - (i) “Community” were omitted;
    - (ii) for “Directive [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”;
  - (b) in paragraph 3, for “Directives [76/464/EEC](#), [80/68/EEC](#) or [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”;
  - (c) in paragraph 4, for “Directives [76/464/EEC](#), [80/68/EEC](#) and [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”;
  - (d) in paragraph 5, in the second sentence—
    - (i) for “Community” there were substituted “ retained EU law ”;
    - (ii) for “Directive [2000/60/EC](#)” there were substituted “ the EU-derived domestic legislation which transposed Directive [2000/60/EC](#) of the European Parliament and of the Council in respect of England and Wales ”.
- (13) Article 20 is to be read as if, in the second sentence, the words from “, taking into account” to the end were omitted.
- (14) Article 24(4) is to be read as if, in the second indent, “Community or” were omitted.
- (15) Annex 3 is to be read as if—
- (a) in the second indent, for “Directive [91/689/EEC](#)” there were substituted “ the Waste Framework Directive ”;
  - (b) in the third indent, for “Directives [67/548/EEC](#) or [1999/45/EC](#)” there were substituted “ Regulation (EC) No [1272/2008](#) of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures ”.
- (16) In sub-paragraph (2)(c), “local authority” has the meaning given in paragraph 4(7).

### Modification of PVR I

**10.**—(1) For the purposes of these Regulations, PVR I is to be read in accordance with this paragraph.

(2) Article 2(k) is to be read as if for the words from “Chapter 1” to the end there were substituted “ regulation 3 of the Merchant Shipping (Technical Requirements for Inland Waterway Vessels) Regulations 2010 ”.

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- (3) Article 4 is to be read as if—
  - (a) in paragraph 1, in the sixth subparagraph, the second and third sentences were omitted;
  - (b) in paragraph 4, the second subparagraph were omitted.
- (4) Annex 1 is to be read as if, in point 1, in the third sentence—
  - (a) for “Member States” there were substituted “ The regulator ”;
  - (b) “special landscape areas which have been designated by national authority” included the Broads, the New Forest and any National Park or Area of Outstanding Natural Beauty.
- (5) Annex 2 is to be read as if—
  - (a) in point 2—
    - (i) in the second paragraph—
      - (aa) in the words before the first indent, for “United Kingdom” there were substituted “ regulator ”;
      - (bb) in the third indent, for “Commission” there were substituted “ appropriate authority ”;
    - (ii) in the third paragraph, for “Member States' competent authorities” there were substituted “ regulator ”;
  - (b) in points 3 and 4, for “Member States' competent authorities” there were substituted “ regulator ”.
- (6) Annex 4 is to be read as if points 2.3, 3.2 and 3.5 were omitted.

#### **Modification of PVR II**

**11.**—(1) For the purposes of these Regulations, PVR II is to be read in accordance with this paragraph.

- (2) Article 3(1) to (3) is to be read as if “Member States shall ensure that” were omitted.
- (3) Article 4 is to be read as if—
  - (a) in paragraph 1, for the words from “Member States” to “such systems is” there were substituted “ The petrol vapour capture efficiency of Stage II petrol vapour recovery systems must be ”;
  - (b) in paragraph 2, the words from “With effect” to “Article 3,” were omitted.
- (4) Article 5 is to be read as if—
  - (a) “Member States shall ensure that”, in each place it occurs, were omitted;
  - (b) in paragraph 1, for “is” there were substituted “ must be ”;
  - (c) in paragraph 2, in the first sentence, for “is” there were substituted “ must be ”;
  - (d) in paragraph 3, for “displays” there were substituted “ must display ”.

#### **Modification of the Waste Framework Directive**

**12.**—(1) For the purposes of these Regulations, the Waste Framework Directive is to be read in accordance with this paragraph.

- (2) When interpreting the Waste Framework Directive for the purposes of these Regulations—
  - (a) an expression used in the Directive that is defined in Part 1 of these Regulations has the meaning given in that Part;
  - (b) “permit” means an environmental permit;

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- (c) a reference to one or more member States in a provision imposing an obligation or conferring a discretion on a member State or member States is to be read as a reference to the appropriate authority, appropriate agency or local authority which, immediately before IP completion day, was responsible for the United Kingdom’s compliance with that obligation or able to exercise that discretion so far as it related to England or Wales;
  - (d) the competent authority is the regulator.
- (3) Article 2 is to be read as if—
- (a) in paragraph 2—
    - (i) in the words before point (a), for “other Community legislation” there were substituted “retained EU law”;
    - (ii) in points (b) and (c), for “Regulation (EC) No 1774/2002” there were substituted “Regulation (EC) No 1069/2009”;
    - (iii) in point (d), for the words from “Directive 2006/21/EC ” to the end there were substituted “the Mining Waste Directive”;
  - (b) in paragraph 3, the words from “Without prejudice” to “Community legislation,” were omitted.
- (4) Article 3(20) is to be read as if for “Article 2(11) of Directive 96/61/EC” there were substituted “Article 3(10) of the Industrial Emissions Directive ”.
- (5) Article 4(2) is to be read as if the second subparagraph were omitted.
- (6) Article 5 is to be read as if—
- (a) in paragraph 1, “Member States shall take appropriate measures to ensure that” were omitted;
  - (b) after paragraph 1 there were inserted—
    - “1A. Any decision as to whether a substance or object is a by-product must be made—
      - (a) in accordance with any regulations setting out detailed criteria on the application of the conditions in paragraph 1 to specific substances or objects; and
      - (b) having regard to any guidance published by the appropriate authority or the appropriate agency for the purposes of this Article.”;
  - (c) paragraphs 2 and 3 were omitted.
- (7) Article 6 is to be read as if—
- (a) in paragraph 1, “Member States shall take appropriate measures to ensure that” were omitted;
  - (b) after paragraph 1 there were inserted—
    - “1A. Any decision as to whether a substance or object has ceased to be waste must be made—
      - (a) in accordance with any regulations or retained direct EU legislation setting out detailed criteria on the application of the conditions in paragraph 1 to specific types of waste; and
      - (b) having regard to any guidance published by the appropriate authority or the appropriate agency for the purposes of this Article.”;
  - (c) in paragraph 2—
    - (i) the first subparagraph were omitted;
    - (ii) in the second subparagraph, for “Those detailed criteria” there were substituted “Any detailed criteria set out in guidance as referred to in paragraph 1A”;

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- (iii) the third and fourth subparagraphs were omitted;
- (d) paragraph 3 were omitted;
- (e) in paragraph 4—
  - (i) in the first subparagraph—
    - (aa) in the first sentence, for the words from the beginning to “Member State”, there were substituted “Where criteria have not been set out as referred to in paragraph 1A(a), the appropriate agency”;
    - (bb) the second sentence were omitted;
  - (ii) in the second subparagraph—
    - (aa) for “Member States” there were substituted “The appropriate agency”;
    - (bb) “by competent authorities” were omitted.
- (8) Article 7 is to be read as if—
  - (a) before paragraph 1 there were inserted—
 

“**A1.** In this Article, the “list of waste” means the list contained in the Annex to Commission [Decision 2000/532/EC](#), as that list has effect in England or in Wales (as the case may be).”;
  - (b) in paragraph 1—
    - (i) the first and second sentences were omitted;
    - (ii) for the third sentence there were substituted “The list of waste shall, except as provided in Commission [Decision 2000/532/EC](#), be binding as regards determination of the waste which is to be considered as hazardous waste or as non-hazardous waste.”;
  - (c) paragraphs 2, 3, 6 and 7 were omitted.
- (9) Article 19(2) is to be read as if, for “a Member State” there were substituted “ the United Kingdom ”.
- (9A) Article 35(1) is to be read as if, for the second paragraph, there were substituted—
 

“They shall make that data available to the regulator through any electronic registry established for the reporting of such data or, if no such registry is in operation, in such form and manner as the regulator may specify.”.
- (10) Annex 3 is to be read as if, in entry HP 9, in the second sentence, “in the Member States” were omitted.
- (11) Annex 4a is to be read as if, in point 6, “, including through Union funds” were omitted.
- (12) In sub-paragraph (2)(c), “local authority” has the meaning given in paragraph 4(7).

### **Modification of the Water Framework Directive**

- 13.**—(1) For the purposes of these Regulations, the Water Framework Directive is to be read in accordance with this paragraph.
- (2) Article 2 is to be read as if paragraph 30 were omitted.
  - (3) Article 11(3)(j) is to be read as if—
    - (a) the reference to “Member States” were a reference to the appropriate authority or appropriate agency;



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- (b) in the words after the final indent, for “established for that body of groundwater” there were substituted “ (which has the meaning given in regulation 2(1) of the Environmental Permitting (England and Wales) Regulations 2016) in relation to a river basin district ”.

### Modification of the WEEE Directive

**14.—**(1) For the purposes of these Regulations, the WEEE Directive is to be read in accordance with this paragraph.

(2) A reference to one or more member States in a provision imposing an obligation or conferring a discretion on a member State or member States is to be read as a reference to the appropriate authority, appropriate agency or local authority which, immediately before IP completion day, was responsible for the United Kingdom's compliance with that obligation or able to exercise that discretion so far as it related to England or Wales.

(3) Article 2 is to be read as if—

- (a) paragraph 2 were omitted;
- (b) in paragraph 3(a), for “Member States” there were substituted “ the United Kingdom ”;
- (c) paragraph 5 were omitted.

(4) Article 3(1) is to be read as if—

(a) after point (a) there were inserted—

“(aa) ‘waste’ means waste within the meaning of Article 3(1) of the Waste Framework Directive, as read with Articles 5 and 6 of that Directive;

(ab) ‘hazardous waste’ has the meaning given by regulation 2(1) of the Environmental Permitting (England and Wales) Regulations 2016;”;

(b) in point (e), “within the meaning of Article 3(1) of Directive 2008/98/EC” were omitted;

(c) in point (f)—

(i) in the words before point (i), for the words from “distance communication” to the end, there were substituted “ by means of distance communication ”;

(ii) in points (i) and (ii)—

(aa) for “a Member State” there were substituted “ the United Kingdom ”;

(bb) for “territory of that Member State” there were substituted “ United Kingdom ”;

(cc) for point (iii) there were substituted—

“(iii) is established in the United Kingdom and places on the market, on a professional basis, EEE from another country; or”;

(iii) in point (iv), in the first subparagraph —

(aa) for “a Member State” there were substituted “ the United Kingdom ”;

(bb) “Member State or in a third” were omitted;

(d) in point (j), for “a Member State” there were substituted “ the United Kingdom ”;

(e) in point (k), for “territory of a Member State” there were substituted “ United Kingdom ”;

(f) for points (m) to (o) there were substituted—

“(m) ‘medical device’ means a medical device within the meaning of regulation 2(1) or 69(1) of the Medical Devices Regulations 2002 which is EEE;

(n) ‘in vitro diagnostic medical device’ means an in vitro diagnostic medical device within the meaning of regulation 2(1) or 137 of the Medical Devices Regulations 2002 which is EEE;

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- (o) ‘active implantable medical device’ means an active implantable medical device within the meaning of regulation 2(1), or the meaning determined in accordance with Schedule 9 to, of the Medical Devices Regulations 2002 which is EEE.”.
- (5) Article 3(2) is to be read as if—
- (a) “ ‘hazardous waste’,” were omitted;
  - (b) for “Directive 2008/98/EC” there were substituted “ the Waste Framework Directive ”.
- (6) Article 8(5) is to be read as if the second to fifth subparagraphs were omitted.
- (7) Article 9 is to be read as if—
- (a) in paragraph 3—
    - (i) “or the registration referred to in paragraphs 1 and 2” were omitted;
    - (ii) the words from “and for the” to the end were omitted;
  - (b) after paragraph 3 there were inserted—
 

“4. In paragraph 3, “permit” means environmental permit.”.
- (8) Annex 7 is to be read as if, in paragraph 1—
- (a) in the first subparagraph—
    - (i) in the first indent, for the words from “Council Directive 96/59/EC ” to the end there were substituted “ the Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000 ”;
    - (ii) in the thirteenth indent, for the words from “Commission Directive 97/69/EC ” to the end there were substituted “ Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures ”;
    - (iii) in the fourteenth indent, for the words from “Article 3” to the end there were substituted “ Annex 7 to the Basic Safety Standards Directive ”;
  - (b) in the second subparagraph, for “Directive 2008/98/EC” there were substituted “ the Waste Framework Directive ”.
- (9) Annex 8 is to be read as if, in paragraph 1, in the words before the first indent, the words from “(without prejudice” to “landfill of waste)” were omitted.
- (10) In sub-paragraph (2), “local authority” has the meaning given in paragraph 4(7).
- (11) In sub-paragraph (4)(c)(i), “by means of distance communication” has the meaning given by regulation 3(1) of the Consumer Protection (Distance Selling) Regulations 2000 .]

## SCHEDULE 2

Regulation 4

### Exempt facilities: general

#### Interpretation: general

##### 1.—(1) In this Schedule—

“occupier” means a person who is or has been the occupier of the land on which an exempt water discharge activity or exempt groundwater activity is carried on;

“operator” means the person carrying on a water discharge activity or groundwater activity;

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“register” means the register which the exemption registration authority is required to establish and maintain under paragraph 11(1);

“registered” means—

- (a) in relation to a waste operation, that the relevant particulars appear on the register during a valid registration period,
- (b) in relation to a water discharge activity, groundwater activity or flood risk activity, that the relevant particulars appear on the register,

and “registration” is to be construed accordingly;

“relevant particulars” has the meaning given in paragraph 10(4);

“valid registration period”, for an exempt waste operation, means the period of validity of a registration referred to in paragraph 15(1), as read with paragraph 15(2);

“WEEE operation” means a waste operation falling within a description in paragraph T11.

(2) In this Schedule, in relation to an exempt waste operation, a reference to any of paragraphs U1 to U16, T1 to [F84T33], D1 to D8 or S1 to S3 has the meaning given in paragraph 1(8) of Chapter 1 of Part 1 of Schedule 3.

#### Textual Amendments

**F84** Word in Sch. 2 para. 1(2) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(a)**

#### Interpretation: exemption registration authority and exemption authority

2.—(1) Subject to sub-paragraph (2), the exemption registration authority in relation to a waste operation falling within a description in Part 1 of Schedule 3 is the appropriate agency.

(2) The exemption registration authority in relation to a waste operation falling within a description in paragraph T3 or T7 is—

- (a) for a waste operation carried on by waste mobile plant by an establishment or undertaking whose principal place of business is in England and Wales, the local authority in whose area it has its principal place of business;
- (b) for a waste operation carried on by waste mobile plant by an establishment or undertaking whose principal place of business is not in England and Wales, the local authority in whose area the operation is first carried on;
- (c) for a waste operation not carried on by waste mobile plant, the local authority in whose area the operation is carried on.

(3) In relation to Wales only, the NRBW is the exemption registration authority in relation to—

- (a) a water discharge activity falling within a description in Part 2 of Schedule 3, and
- (b) a groundwater activity falling within a description in Part 3 of Schedule 3.

(4) In relation to England only—

- (a) the Agency is the exemption registration authority in relation to—
  - (i) a water discharge activity falling within a description in paragraph 1 of Part 2 of Schedule 3, and
  - (ii) a groundwater activity falling within a description in paragraph 2 or 5 of Part 3 of Schedule 3;
- (b) the Agency is the exemption authority in relation to—

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- (i) a water discharge activity falling within a description in paragraph 3 of Part 2 of Schedule 3, and
- (ii) a groundwater activity falling within a description in paragraph 4 of Part 3 of Schedule 3.

(5) The exemption registration authority in relation to a flood risk activity falling within a description in Part 4 of Schedule 3 is the appropriate agency.

### General condition

3. The general condition for an operation or activity in this Schedule is that the operation or activity is not an operation or activity that falls within Chapter 5 of Part 2 of Schedule 1 (waste management).

### Exempt waste operations

- 4.—(1) For the purpose of the definition of “exempt waste operation”, the requirements are—
- (a) that a waste operation—
    - (i) falls within a description in Part 1 of Schedule 3, and
    - (ii) satisfies the general and specific conditions specified in that Part in relation to the description,
  - (b) subject to sub-paragraph (2) and paragraph 13(10) of this Schedule, that—
    - (i) the waste operation is registered, and
    - (ii) an establishment or undertaking is registered in relation to it, and
  - (c) that the type and quantity of waste submitted to the waste operation, and the method of disposal or recovery, are consistent with the need to attain the objectives mentioned in Article 13 of the Waste Framework Directive.

(2) The registration requirements in sub-paragraph (1)(b) do not apply in respect of a waste operation carried on by a person who is not an establishment or undertaking.

### Exempt water discharge activities: Wales

5. For the purpose of the definition of “exempt water discharge activity”, the requirements in Wales are—

- (a) that a water discharge activity—
  - (i) falls within a description in Part 2 of Schedule 3, and
  - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in that Part,
- (b) that the water discharge activity is registered and, subject to paragraph 13(10) of this Schedule, for a water discharge activity that falls within a description in—
  - (i) paragraph 1 of Part 2 of Schedule 3, the operator is registered in relation to the activity, or
  - (ii) paragraph 2 of Part 2 of that Schedule, the occupier is registered in relation to the activity, and
- (c) that the water discharge activity does not cause pollution of inland freshwaters, coastal waters or relevant territorial waters.

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### **Exempt water discharge activities: England**

6. For the purpose of the definition of “exempt water discharge activity”, the requirements in England are—

- (a) that the water discharge activity—
  - (i) falls within a description in Part 2 of Schedule 3, and
  - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in that Part,
- (b) where the water discharge activity falls within a description in paragraph 1 of Part 2 of Schedule 3, that (in addition to the requirements in sub-paragraph (a))—
  - (i) the activity is registered by the operator, and
  - (ii) subject to paragraph 13(10) of this Schedule, the operator is registered in relation to that activity, and
- (c) that the water discharge activity does not cause pollution of inland freshwaters, coastal waters or relevant territorial waters.

### **Exempt groundwater activities: Wales**

7. For the purpose of the definition of “exempt groundwater activity”, the requirements in Wales are—

- (a) that a groundwater activity—
  - (i) falls within a description in Part 3 of Schedule 3, and
  - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in that Part,
- (b) that the groundwater activity is registered and, subject to paragraph 13(10) of this Schedule, for a groundwater activity that falls within a description in—
  - (i) paragraph 2 of Part 3 of Schedule 3, the operator is registered in relation to the activity,
  - (ii) paragraph 3 of Part 3 of that Schedule, the occupier is registered in relation to the activity, or
  - (iii) paragraph 5 of Part 3 of that Schedule, the operator is registered in relation to the activity, and
- (c) that the groundwater activity does not cause pollution of groundwater.

### **Exempt groundwater activities: England**

8. For the purpose of the definition of “exempt groundwater activity”, the requirements in England are—

- (a) that the groundwater activity—
  - (i) falls within a description in Part 3 of Schedule 3, and
  - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in that Part,
- (b) where the groundwater activity falls within a description in paragraph 2 or 5 of Part 3 of Schedule 3, that (in addition to the requirements in sub-paragraph (a))—
  - (i) the activity is registered by the operator, and
  - (ii) subject to paragraph 13(10) of this Schedule, the operator is registered in relation to the activity, and

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- (c) that the groundwater activity does not cause pollution of groundwater.

### Exempt flood risk activities

9. An “exempt flood risk activity” is a flood risk activity that—
- (a) falls within a description in Part 4 of Schedule 3,
  - (b) satisfies, in relation to an activity of that description, the relevant conditions specified in that Part,
  - (c) is registered, and
  - (d) is an activity in relation to which the operator is registered.

### Procedure for registering an exempt facility

10.—(1) An establishment or undertaking seeking to be registered in relation to a waste operation described in Part 1 of Schedule 3, or seeking to renew such a registration, must notify the exemption registration authority of—

- (a) the relevant particulars, and
- (b) the information specified in sub-paragraph (5).

(2) An occupier or operator seeking to be registered in relation to a water discharge activity described in Part 2 of Schedule 3 or a groundwater activity described in Part 3 of that Schedule must notify the exemption registration authority of the relevant particulars.

(3) An operator seeking to be registered in relation to a flood risk activity described in Part 4 of Schedule 3 must notify the exemption registration authority of the relevant particulars.

- (4) The relevant particulars are—
- (a) the name and address of—
    - (i) for a waste operation, the establishment or undertaking, or
    - (ii) for a water discharge activity, groundwater activity or flood risk activity, the occupier or operator,
  - (b) a description of the waste operation, water discharge activity, groundwater activity or flood risk activity,
  - (c) the place where the waste operation, water discharge activity, groundwater activity or flood risk activity is carried on, including—
    - (i) the postcode (if applicable), or
    - (ii) the Ordnance Survey National Grid reference point, and
  - (d) if the waste operation is a WEEE operation, the type and quantity of waste subject to the operation.

(5) The information in this sub-paragraph is the name and contact details of an individual officer or employee designated by the establishment or undertaking as the primary contact for the purposes of registration.

(6) Notification under sub-paragraph (1) or (2) must be in the form specified by the exemption registration authority.

(7) A notification under sub-paragraph (1) relating to a waste operation that is a WEEE operation must be accompanied by the applicable fee.

(8) In sub-paragraph (7), “applicable fee” means the fee prescribed under a charging scheme made under section 41 of the 1995 Act <sup>M50</sup>.

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### Marginal Citations

**M50** Section 41 was amended by paragraph 39 of Schedule 4 to the [Flood and Water Management Act 2010](#) (c. 29) and by [S.I. 2005/894](#), 1806 (W. 138), 2006/937, 2007/1711, 3106, 2008/3087, 2009/890, 3381, 2011/988, 1043, 2911, 2012/1659, 2788, 2013/755 (W. 90), 1821 and 2014/861.

### Register of exempt facilities

**11.**—(1) Every exemption registration authority must establish and maintain a register of exempt facilities in relation to which it is the exemption registration authority.

(2) Subject to sub-paragraphs (4) and (5), the exemption registration authority must ensure the register contains the relevant particulars—

- (a) for an exempt waste operation other than a WEEE operation, within 5 working days after the date that it receives notification of the relevant particulars and the information specified in paragraph 10(5);
- (b) for a WEEE operation—
  - (i) where a decision is made under sub-paragraph (3) not to inspect the operation, within 5 working days after the date of the decision;
  - (ii) otherwise, within 5 working days after the date of the inspection under sub-paragraph (3);
- (c) for an exempt water discharge activity, exempt groundwater activity or exempt flood risk activity, within 15 working days after the date that it receives notification of the relevant particulars.

(3) Where information notified in accordance with paragraph 10(1) relates to a WEEE operation, the exemption registration authority may carry out an inspection of the operation before adding the information to the register in accordance with sub-paragraph (2).

(4) Where following an inspection carried out under sub-paragraph (3) the authority is not satisfied that a WEEE operation would meet the conditions in sub-paragraph (3) of paragraph T11, the information notified must not be added to the register.

(5) The exemption registration authority must ensure the register is updated to reflect any changes notified under paragraph 16(1) of this Schedule or under Part 2 or 3 of Schedule 3—

- (a) for exempt waste operations, within 5 working days after the date that it receives the notification, or
  - (b) for exempt water discharge activities, exempt groundwater activities and exempt flood risk activities, within 15 working days after that date.
- (6) Every exemption registration authority must—
- (a) ensure that its register is open to inspection by the public free of charge at all reasonable hours, and
  - (b) provide reasonable facilities to the public for obtaining a copy of an entry on payment of a reasonable charge.
- (7) A register may be kept in any form.

### Duty to remove entries from the register

**12.**—(1) The duty to maintain a register in paragraph 11(1) includes a duty to remove an entry from the register if—

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- (a) the exemption registration authority becomes aware that the exempt facility is no longer in operation at the place stated in the relevant particulars, or
  - (b) the facility ceases to be an exempt facility.
- (2) If the exemption registration authority removes an entry from the register under sub-paragraph (1), it must notify without delay the occupier, operator or other person registered in relation to the exempt facility.
- (3) Sub-paragraph (2) does not apply if the exemption registration authority was notified by the person registered in relation to the facility that the facility is no longer in operation at the place stated in the relevant particulars.

### **Exclusion from the register of information affecting national security**

**13.**—(1) The appropriate authority may direct the exemption registration authority that, in the interests of national security, specified information or information of a specified description must be excluded from the register.

(2) The exemption registration authority must notify the appropriate authority of any information it excludes from the register pursuant to such a direction.

(3) The appropriate authority may direct the exemption registration authority that, in the interests of national security, before information of a specified description is included on the register, the information must be referred to the appropriate authority for determination as to whether or not it should be excluded from the register.

(4) A determination by the appropriate authority under sub-paragraph (3) to exclude information from the register must be given effect by a direction under sub-paragraph (1).

(5) A person may give a notice to the appropriate authority stating that, in the person's opinion, the inclusion of information on the register would be contrary to the interests of national security.

(6) A notice under sub-paragraph (5) must specify the information and indicate its apparent nature.

(7) A person giving a notice under sub-paragraph (5) must at the same time notify the exemption registration authority.

(8) The exemption registration authority must not include information notified under sub-paragraph (5) on the register unless the appropriate authority determines that it may be included.

(9) A determination by the appropriate authority to exclude information notified under sub-paragraph (5) from the register must be given effect by a direction under sub-paragraph (1).

(10) In relation to an exempt facility that is the subject of a direction or notice given under this paragraph, the requirement in paragraph 4(1)(b), 5(b), 6(b), 7(b) or 8(b)—

- (a) does not apply where a direction or notice requires the exclusion of all relevant particulars from the register, and
- (b) is satisfied where—
  - (i) a direction under sub-paragraph (1) requires the exclusion of some, but not all, relevant particulars from the register,
  - (ii) a direction under sub-paragraph (3) which is pending a determination under that sub-paragraph requires the exclusion of relevant particulars from the register, or
  - (iii) a notice under sub-paragraph (5) which is pending a determination under sub-paragraph (8) requires the exclusion of relevant particulars from the register,

and where any relevant particulars which are not subject to a direction or notice are included on the register.



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### **Restrictions on registering exempt waste operations carried on at the same place**

**14.—**(1) An establishment or undertaking may not be registered more than once during a valid registration period in relation to any one waste operation described in Part 1 of Schedule 3 that is carried on or is to be carried on at the same place.

(2) If an establishment or undertaking is registered more than once in contravention of sub-paragraph (1), the second and any subsequent registration is invalid.

(3) Subject to sub-paragraph (7), not more than one establishment or undertaking may be registered at the same time in relation to the same waste operation described in Part 1 of Schedule 3 if the operation is carried on or is to be carried on at the same place.

(4) If more than one establishment or undertaking is registered in contravention of sub-paragraph (3), only the registration specified in sub-paragraph (5) is valid.

(5) The registration specified in this sub-paragraph is the registration of the establishment or undertaking in respect of which the relevant particulars first appeared on the register in the relevant period.

(6) In this paragraph, “relevant period” means the period during which the relevant particulars appear on the register.

(7) Sub-paragraph (3) does not apply in relation to a waste operation falling within a description in paragraph D2.

### **Validity of registration of waste operations**

**15.—**(1) A first registration or a registration in relation to a WEEE operation is valid for 3 years.

(2) Any other registration in relation to a waste operation is valid until the end of validity of the first registration.

(3) For the purposes of sub-paragraphs (1) and (2), the period of validity of a registration commences on the date of registration or on the most recent renewal date, as the case may be.

(4) An establishment or undertaking may renew a registration at any time in the month prior to the registration becoming invalid (and the registration procedure specified in paragraph 10 applies in relation to any such renewal).

(5) Where an establishment or undertaking has renewed a registration, the renewal takes effect on the day after the day on which the previous registration becomes invalid.

(6) In this paragraph—

“date of registration” means the date on which the relevant particulars first appear on the register;

“first registration” means—

(a) the first appearance on the register of relevant particulars for an establishment or undertaking in relation to a waste operation other than a WEEE operation, or

(b) in the case of a renewal, the first such appearance following the end of validity of the registration, other than the end of validity of the registration of a WEEE operation;

“renewal date” means the date that the renewal of a registration takes effect.

### **Changes to relevant particulars relating to waste operations**

**16.—**(1) An establishment or undertaking registered in relation to a waste operation must notify the exemption registration authority without delay of any changes to—

(a) any of the relevant particulars, and

(b) any of the information specified in paragraph 10(5).

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(2) If an establishment or undertaking does not comply with sub-paragraph (1)(a), the exemption registration authority may remove from the register the entry made in respect of the establishment or undertaking.

(3) Notification under sub-paragraph (1) must be in the form specified by the exemption registration authority.

(4) The exemption registration authority must notify the establishment or undertaking without delay if it removes an entry from the register pursuant to sub-paragraph (2).

### Record keeping for exempt waste operations

17.—(1) This paragraph applies to every exempt waste operation where the waste operation—

- (a) is a WEEE operation, or
- (b) falls within a description in—
  - (i) subject to sub-paragraph (2), paragraph U10 or U11;
  - (ii) paragraph T9 <sup>F85</sup>, T12, T14, T15, T30, T33 or U8];
  - (iii) paragraph <sup>F86</sup>T3, T7 or T17] where the operation is carried on by waste mobile plant.

(2) But it does not apply in relation to an exempt waste operation where—

- (a) the waste operation falls within a description in paragraph U10 or U11, and
- (b) the establishment or undertaking is required to keep records in relation to the operation and the waste that is subject to that operation under the Nitrate Pollution Prevention Regulations 2015 <sup>M51</sup> or <sup>F87</sup>the Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021].

(3) An establishment or undertaking which carries on an exempt waste operation to which this paragraph applies must—

- <sup>F88</sup>(a) keep chronological records of—
  - (i) the quantity, nature and origin of all waste disposed of or recovered in the course of that operation;
  - (ii) where the waste operation involves the treatment of hazardous waste, the quantity of products and materials resulting from preparing for re-use, recycling or other recovery operations in the course of that operation; and
  - (iii) where relevant, the destination, frequency of collection, mode of transport and treatment method of all waste disposed of or recovered in the course of that operation; and]
- (b) where the waste operation falls within a description in paragraph <sup>F89</sup>T3, T7 or T17] and is carried on by waste mobile plant, keep records of the places where the operation is carried on.

(4) An establishment or undertaking which carries on an exempt waste operation to which this paragraph applies must—

- <sup>F90</sup>(a) if the operation involves the treatment of hazardous waste—
  - (i) retain any records that it is required to keep under sub-paragraph (3) for a period of 3 years; and
  - (ii) during that period, if the exemption registration authority so directs, send those records to the exemption registration authority in such form and manner as the exemption registration authority specifies,
- (b) if the operation does not involve the treatment of hazardous waste—

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- (i) retain any records that it is required to keep under sub-paragraph (3) for a period of 2 years; and
- (ii) during that period make those records available to the exemption registration authority on request.]

#### Textual Amendments

- F85** Words in Sch. 2 para. 17(1)(b)(ii) inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(b)(i)(aa)**
- F86** Words in Sch. 2 para. 17(1)(b)(iii) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(b)(i)(bb)**
- F87** Words in Sch. 2 para. 17(2)(b) substituted (1.4.2021) by [The Water Resources \(Control of Agricultural Pollution\) \(Wales\) Regulations 2021 \(S.I. 2021/77\)](#), regs. 1(3), **49(1)**
- F88** Sch. 2 para. 17(3)(a) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(b)(ii)(aa)**
- F89** Words in Sch. 2 para. 17(3)(b) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(b)(ii)(bb)**
- F90** Sch. 2 para. 17(4)(a)(b) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(3)(b)(iii)**

#### Marginal Citations

- M51** [S.I. 2015/668](#).

### Periodic inspections of establishments and undertakings

**18.** Every exemption registration authority must carry out appropriate periodic inspections of establishments and undertakings carrying on exempt waste operations in respect of which it is the exemption registration authority.

## SCHEDULE 3

Regulation 4

Exempt facilities and waste operations to which section 33(1)  
(a) of the 1990 Act does not apply: descriptions and conditions

### PART 1

Exempt waste operations: descriptions and conditions

#### CHAPTER 1

Interpretation of Part 1

#### Interpretation

**1.—(1)** In this Part—

“agricultural land” has the meaning given in section 109(1) of the Agriculture Act 1947 <sup>M52</sup> and, for the purposes of the descriptions in paragraphs U10 and U11, includes land used for the production of timber or other non-food crops;

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“anaerobic digestion” means the mesophilic and thermophilic biological decomposition and stabilisation of biodegradable waste which—

- (a) is carried on under controlled anaerobic conditions, and
- (b) results in stable sanitised material that can be applied to land for the benefit of agriculture or to improve the soil structure or nutrients in land;

“associated storage” means storage of waste that—

- (a) is associated with the use, treatment or disposal of waste, and
- (b) takes place at the place where the use, treatment or disposal is carried on;

“bank” means a bank, wall or embankment adjoining or confining, or constructed for the purposes of or in connection with, any channel and includes all land between the bank and low-watermark;

“construction” means the carrying on of building or engineering work which includes the repair, alteration, maintenance or improvement of an existing work and preparatory or landscaping works;

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the surface;

“inland waters” has the meaning given in section 221(1) of the 1991 Act;

“List of Wastes” means the list of wastes established by Commission Decision [2000/532/EC](#) replacing Decision [94/3/EC](#) establishing a list of wastes pursuant to Article 1(a) of Council Directive [75/442/EEC](#) on waste and Council Decision [94/904/EC](#) establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive [91/689/EEC](#) on hazardous waste <sup>M53</sup>, as amended from time to time;

“place of production” means, in relation to any waste, the place where the waste was originally produced;

“Plant Health notice” means a notice served under—

- (a) article 13 of the Plant Health (*Phytophthora ramorum*) (Wales) Order 2006 <sup>M54</sup>;
- (b) article 31 of the Plant Health (Forestry) Order 2005 <sup>M55</sup>;
- (c) article 32 of the Plant Health (England) Order 2015 <sup>M56</sup>;
- (d) article 32 of the Plant Health (Wales) Order 2006 <sup>M57</sup>;

“relevant waste”, where it appears in any paragraph in this Part, means waste that—

- (a) falls within a code specified in the first column of the table in the paragraph, and
- (b) is of a type specified in the second column of the table;

“scrap metal” has the meaning given in section 21 of the Scrap Metal Dealers Act 2013 <sup>M58</sup>;

“sealed drainage” means a drainage system with an impermeable surface which ensures that—

- (a) no liquid will run off the surface otherwise than via the system, and
- (b) except where they may be lawfully discharged, all liquids entering the system are collected in a sealed sump;

“secondary containment” means a bund or any other system for preventing waste which has leaked from the primary container from escaping from the place where it is stored or treated.

(2) In this Part, a six-digit code used to refer to a waste is a reference to the waste specified by the six-digit code in the List of Wastes, except insofar as the waste in this Part in relation to such a code does not include some of the types of waste specified by the code in the List.

(3) Where a bund is used as secondary containment—

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- (a) the bund must have an impermeable lining and—
    - (i) have a capacity of not less than 110% of the original container's storage capacity, or
    - (ii) if there is more than one container within the containment system, have a capacity of not less than 110% of the largest container's storage capacity or 25% of the aggregate storage capacity, whichever is the greater, and
  - (b) reasonable precautions must be taken to ensure that the capacities specified in paragraph (a) are maintained at all times.
- (4) When interpreting this Part, a container, lagoon or other place is secure in relation to waste kept in it if—
- (a) all reasonable precautions are taken to ensure that the waste cannot escape from it, and
  - (b) members of the public are unable to gain access to the waste.
- (5) Where a quantity limit is specified in relation to more than one operation (storage, use or treatment) in any one specific or additional condition, that quantity limit applies to all of those operations on an aggregate basis.
- (6) Where a waste operation is carried on by waste mobile plant, the quantity limits specified in any specific or additional specific condition in any Chapter of this Part apply in relation to each place where the operation is carried on.
- (7) The quantity limits specified in any specific condition in paragraphs U1, U2, U10, U11, U12 and U15 that relate to the use or storage of waste over a specified period apply for that period regardless of whether more than one establishment or undertaking carries on the operation at the same place over that period.
- (8) In this Part—
- (a) a reference to any of paragraphs U1 to U16 is a reference to a paragraph numbered 1 to 16 in Section 2 of Chapter 2 (use of waste);
  - (b) a reference to any of paragraphs T1 to [F<sup>91</sup>T33] is a reference to a paragraph numbered 1 to [F<sup>92</sup>33] in Section 2 of Chapter 3 (treatment of waste);
  - (c) a reference to any of paragraphs D1 to D8 is a reference to a paragraph numbered 1 to 8 in Section 2 of Chapter 4 (disposal of waste);
  - (d) a reference to any of paragraphs S1 to S3 is a reference to a paragraph numbered 1 to 3 in Section 2 of Chapter 5 (storage of waste).

#### Textual Amendments

- F91** Word in Sch. 3 Ch. 1 para. 1(8)(b) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(a)(i)**
- F92** Word in Sch. 3 Ch. 1 para. 1(8)(b) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(a)(ii)**

#### Marginal Citations

- M52** 1947 c. 48.
- M53** OJ No L 226, 6.9.2000, p 3, as last amended by Commission Decision 2014/955/EU (OJ No L 370, 30.12.2014, p 44).
- M54** [S.I. 2006/1344](#) (W. 134), to which there are amendments not relevant to these Regulations.
- M55** [S.I. 2005/2517](#); relevant amending instruments are [S.I. 2011/1043](#), 2013/755 (W. 90), 2014/2420 and 2015/1723 (W. 235).
- M56** [S.I. 2015/610](#), to which there are amendments not relevant to these Regulations.
- M57** [S.I. 2006/1643](#) (W. 158), amended by [S.I. 2011/1043](#); there are other amending instruments but none is relevant.

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**M58** 2013 c. 10.

## CHAPTER 2

### Use of waste

#### SECTION 1

##### Introductory

- 1.—(1) The descriptions in this Chapter—
- (a) are set out in the first sub-paragraph of paragraphs U1 to U16, and
  - (b) include associated storage.
- (2) The specific conditions for each description in this Chapter are set out in the third sub-paragraph of paragraphs U1 to U16.
- (3) The general conditions for all descriptions in this Chapter are as follows—
- (a) the operation is for the purposes of recovering or reusing the waste, unless otherwise stated in the specific conditions;
  - (b) the waste used is suitable for the purposes of the operation;
  - (c) no more waste is used than is necessary to carry on the operation.

#### SECTION 2

##### Descriptions and specific conditions

### Use of waste in construction (U1)

- 1.—(1) The use of relevant waste in construction.
- (2) The tables specifying relevant waste for the purposes of this paragraph are set out below.

**Table 1**

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit</i>	<i>Additional specific conditions</i>
010102	Waste from mineral non-metalliferous excavation	5,000 tonnes	
010408	Waste gravel and crushed rock other than those mentioned in 010407		
010409	Waste sand and clays		
020202	Shellfish shells from which the soft tissue or flesh has been removed only		
101208	Waste ceramics, bricks, tiles and construction products (after thermal processing)		
101314	Waste concrete and concrete sludge		
170101	Concrete		
170102	Bricks		

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170103	Tiles and ceramics	
170107	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 170106	
170506	Dredging spoil other than those mentioned in 170505	A
170508	Track ballast other than those mentioned in 170507	
191205	Glass	
191209	Minerals (for example sand, stones)	
191212	Aggregates only	

**Table 2**

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit</i>	<i>Additional specific conditions</i>
020399, 020401	Soil from cleaning and washing fruit and vegetables only	1,000 tonnes	
170302	Bituminous mixtures other than those mentioned in 170301	1,000 tonnes	B
170504	Soil and stones other than those mentioned in 170503	1,000 tonnes	
170506	Dredging spoil other than those mentioned in 170505	1,000 tonnes	
191302	Solid wastes from soil remediation other than those mentioned in 191301	1,000 tonnes	
200202	Soil and stones	1,000 tonnes	
020103	Plant tissue waste	1,000 tonnes	B
030101, 030301	Untreated waste bark, cork and wood only	1,000 tonnes	B
030105	Untreated wood including sawdust, shavings and cuttings from untreated wood only	1,000 tonnes	B
170201	Untreated wood only	1,000 tonnes	B
191207	Untreated wood other than those mentioned in 191206 only	1,000 tonnes	B
200138	Untreated wood other than those mentioned in 200137 only	1,000 tonnes	B

**Table 3**

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit</i>	<i>Additional specific conditions</i>
170302	Bituminous mixtures other than those mentioned in 170301	50,000 tonnes	C
170504	Road sub base only		C

(3) For the purposes of this paragraph, the specific conditions are that—

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- (a) where the relevant waste falls within the first column of a table in sub-paragraph (2), the total quantity of waste used or stored over any 3-year period does not exceed the limit indicated in the third column of that table,
- (b) where one or more waste type falling within the first column of any one table in sub-paragraph (2) is used or stored, the total quantity for all the waste types used or stored does not exceed the limit indicated in the third column of that table over any 3-year period,
- (c) no waste is stored for longer than 12 months prior to use, and
- (d) the operation complies with such of the following additional conditions as are specified in the fourth column of the table and for these purposes—

A	the waste is used only for drainage work carried on for the purposes of the Land Drainage Act 1991 <small>M59</small> , the 1991 Act or the 1995 Act;
B	the waste is used only for the construction of tracks, paths, bridleways or car parks and must be processed into chipped form prior to use;
C	the waste is used only for the construction of roads.

**Marginal Citations**  
**M59** 1991 c. 59.

**Use of baled end-of-life tyres in construction (U2)**

- 2.—(1) The use of relevant waste in construction.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
160103	Baled end-of-life tyres only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste used or stored during the construction does not exceed 50 tonnes of baled tyres,
  - (b) the waste is not used more than once,
  - (c) the bales comply with standard PAS108, and
  - (d) no waste is stored for longer than 3 months prior to use.

**Use of waste in the construction of entertainment or educational installations etc. (U3)**

- 3.—(1) The use of relevant waste in the construction of installations, exhibits, sets or demonstrations for entertainment or educational purposes.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
170102	Bricks
170103	Tiles and ceramics



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170201, 200138	Wood
170203, 200139	Plastic
170401 to 170407, 170411, 200140	Metals including their alloys
200101	Paper and cardboard
200111	Textiles

(3) For the purposes of this paragraph, the specific condition is that the total quantity of waste used or stored prior to use does not exceed 20 tonnes at any one time.

#### **Burning of waste as a fuel in a small appliance (U4)**

4.—(1) The burning of relevant waste as a fuel in an appliance if the requirements in sub-paragraph (4) are met.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
020103, 200201	Plant tissue waste only
020107, 170201	Untreated wood only
020304	Vegetable waste unsuitable for consumption or processing
030101	Waste bark and cork
030105	Untreated sawdust and wood shavings other than those mentioned in 030104 only
030301	Waste bark and wood
030310	Fibre rejects (fibrous vegetable waste from virgin pulp preparation or paper pulp production) only
150103	Untreated wooden packaging only

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste burned over any period of 1 hour is less than 50kg,
- (b) the total quantity of waste stored at any one time does not exceed 10 tonnes, and
- (c) the waste is stored in a secure place.

(4) The requirements in this sub-paragraph are that—

- (a) the appliance has a net rated thermal input of less than 0.4 megawatts, and
- (b) where it is used together with other appliances (whether or not it is operated simultaneously with such other appliances), the aggregate net rated thermal input of all the appliances is less than 0.4 megawatts.

#### **Use of waste derived biodiesel as fuel (U5)**

5.—(1) The use of biodiesel derived from relevant waste as a fuel in a portable generator if the requirements in sub-paragraph (4) are met or in a motor vehicle and the storage of such biodiesel—

- (a) in or on a motor vehicle or in such a portable generator, or
- (b) at a place that is owned or occupied by the owner or user of the biodiesel.

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(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
190210	Waste derived biodiesel only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of biodiesel stored in or on a motor vehicle or in a portable generator at any one time does not exceed 1,000 litres,
  - (b) the total quantity of biodiesel stored at a place owned or occupied by the owner or user of the biodiesel at any one time does not exceed 5,000 litres, and
  - (c) the biodiesel is stored with secondary containment.
- (4) The requirements in this sub-paragraph are that—
- (a) the portable generator has a net rated thermal input of less than 0.4 megawatts, and
  - (b) where it is used together with other portable generators (whether or not it is operated simultaneously with such other generators) the aggregate net rated thermal input of all the generators is less than 0.4 megawatts.

**Use of sludge for the purposes of re-seeding a waste water treatment plant (U6)**

6.—(1) The use of relevant waste at a waste water treatment plant for the purposes of re-seeding the plant.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
190805	Sludges from treatment of urban waste water
190812	Sludges from biological treatment of industrial waste water other than those mentioned in 190811

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste used or stored at the plant at any one time does not exceed 1,000 cubic metres, and
  - (b) the waste was not produced at the plant.

**Use of effluent to clean a highway gravel bed (U7)**

7.—(1) The use of relevant waste from a water treatment works or a waste water treatment plant to clean a highway gravel bed.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
190899	Effluent only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste used over any 24-hour period does not exceed 10 cubic metres,
  - (b) the highway gravel bed has sealed drainage to ensure that the condition in paragraph (c) can be met,

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- (c) all waste used in and produced by the cleaning operation is collected, and
- (d) the waste meets any relevant conditions specified in the environmental permit authorising the operation of the water treatment works or waste water treatment plant.

**Use of waste for a specified purpose (U8)**

- 8.—(1) The use of relevant waste for a specified purpose.
- (2) For the purposes of this paragraph—
- (a) the table specifying relevant waste and the limits referred to in sub-paragraph (3)(a) and (b) is set out below;
  - (b) “specified purpose” is a purpose specified in the third column of the table.

<i>Codes</i>	<i>Waste types</i>	<i>Specified purpose</i>	<i>Quantity limit (at any one time)</i>
030105, 191207	Untreated wood (including shavings, woodchip and sawdust) and over-sized compost only	Use in equestrian exercise surfaces	1,000 tonnes
191204	Shredded or granulated rubber and end-of-life tyres only	Use in equestrian exercise surfaces	1,000 tonnes
191201	Shredded paper and cardboard	Use as animal bedding	100 tonnes
030305, 030311	030310, Paper fibre, de-inked paper pulp and de-inked paper sludge from paper manufacturing only	Use as animal bedding	100 tonnes
030105, 191207	Untreated wood (including shavings, woodchip and sawdust) and over-sized compost only	Use as animal bedding	100 tonnes
160103	End-of-life tyres	Use as a weight on cover sheeting on agricultural premises or use as crash barriers	40 tonnes
150102	Geotextile bags (flexible intermediate bulk containers) only	Use as reinforcement in construction	100 bags
020202	Shellfish shells from which the soft tissue or flesh has been removed only	Use for ornamental purposes	50 tonnes
191205	Crushed glass only	Use for ornamental purposes	50 tonnes

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200127*, 080111*,	200128, 080112	Paints (excluding specialist and industrial paints, wood preservatives, aerosol and spray paints, inks, adhesives and resins)	Use as paint	1,000 litres
190599		Compost produced for the purposes of growing mushrooms only	Use in growing mushrooms	1,000 tonnes
170102, 170904		Stones and bricks capable of being used in their existing state only	Use in construction of buildings, fencing, barriers, containment or similar above ground construction	100 tonnes
170201, 200138	191207,	Non-hazardous wood including telegraph poles and railway sleepers and lock gates and associated balance beams	Use in construction of buildings, fencing, barriers, containment or similar above ground construction	100 tonnes
110105*, 110107*		Ferric chloride and aluminium hydroxide only	Use in treating municipal waste water effluent	50 cubic metres
110105*, 110107*		Ferric chloride and aluminium hydroxide only	Use in potable water treatment processes	50 cubic metres
190902, 190906	190903,	Sludges/solutions from the treatment of water only	Use in treating municipal waste water effluent	50 cubic metres
100201, 170504, 191209	100202,	Blast furnace slag and stones only	Use as filter media at waste water treatment works	50,000 tonnes
170204*, 200137*	191206*,	Hazardous wooden telegraph poles and railway sleepers and lock gates and associated balance beams only	Use in construction of buildings, fencing, barriers, containment or similar above ground construction	100 tonnes

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total amount of waste used or stored at any one time does not exceed the quantity limit specified in the fourth column,
- (b) in relation to any relevant waste to which code 160103 applies (end-of-life tyres), within the quantity limit specified for that waste type, not more than 10 tonnes is stored together,
- (c) the waste is not treated or required to be treated prior to use,

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- (d) in relation to any relevant waste to which code 110105\* (ferric chloride), 110107\* (aluminium hydroxide), 190902, 190903, 190906 (sludges/solutions from the treatment of water) applies, the waste is stored—
  - (i) with secondary containment, and
  - (ii) in a location with sealed drainage, and
- (e) in relation to any relevant waste to which code 110105\* (ferric chloride), 110107\* (aluminium hydroxide) applies, within the quantity limit specified for that waste type, not more than 10 tonnes of waste may be used per day.

**Use of waste to manufacture finished goods (U9)**

9.—(1) The use of relevant waste to manufacture finished goods.

(2) The table specifying relevant waste for the purposes of this paragraph and the quantity limits referred to in sub-paragraph (3)(a) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit (at any one time)</i>	<i>Additional conditions</i>	<i>specific</i>
100101, 100102	Ash only	500 tonnes	A	
101208	Ceramics	100 tonnes	A	
101112, 150107, 191205, 200102	Glass	5,000 tonnes	A	
100105	Gypsum only	500 tonnes	A	
200199	Lion faeces only	5 tonnes	B	
120101, 120103, 150104, 160117, 160118, 191001, 191002, 191202, 191203, 200140	Metals	500 tonnes	A	
150101, 191201, 200101	Paper and cardboard	15,000 tonnes	C, D	
070213, 120105, 150102, 191204, 200139	Plastics	500 tonnes	E	
191204	Rubber only	30 tonnes	E, F	
040221, 040222, 150109, 191208, 200110, 200111	Textiles	1,000 tonnes	B	
030105, 030301, 150103, 191207, 200138	Wood, bark, cork, sawdust, shavings, cuttings, particle board	100 tonnes	B	

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste used or stored at any one time does not exceed the quantity limit specified in the third column of the table in sub-paragraph (2),
  - (b) the waste is stored in a secure location at the place where the manufacturing is carried on,
  - (c) the operation does not involve any activity falling within a description in Part A(1) or Part A(2) of Part 2 of Schedule 1, and
  - (d) the operation complies with such of the following additional specific conditions as are specified in the fourth column of the table—

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A	the waste is stored at a location with sealed drainage;
B	the waste is stored indoors or in a secure container;
C	the waste is stored in a baled form, in a container or indoors;
D	within the quantity limit specified in the third column of the table and notwithstanding additional specific condition C, up to 1,000 tonnes may be stored outdoors so long as it is stored in an enclosure designed and maintained to prevent the escape of litter;
E	the waste is not subject to heat treatment;
F	the total quantity of waste stored together does not exceed 10 tonnes.

(4) For the purposes of this paragraph, “finished goods” means goods that are ready for use by an end consumer without any further processing.

### Spreading waste on agricultural land to confer benefit (U10)

**10.**—(1) The spreading of relevant waste on agricultural land to confer benefit to the land for the purposes of providing, maintaining or improving the soil's ability to provide a growing medium by adding nutrients, lime or biomass.

(2) The table specifying relevant waste for the purposes of this paragraph and the quantity and storage limits referred to in sub-paragraph (3) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit</i>	<i>Storage limit (at any one time)</i>	<i>Period</i>	<i>Additional specific conditions</i>
010102, 010408, 170504	Chalk only	50 tonnes per hectare	200 tonnes	12 months	A
020101	Sludges from washing and cleaning fruit and vegetables on farm only	50 tonnes per hectare	200 tonnes	12 months	A, F
020199, 020399	Untreated wash waters from cleaning fruit and vegetables on farm only	100 tonnes per hectare	200 tonnes	12 months	A, F
020305	Effluent from the on-site treatment of wash waters from cleaning fruit and vegetables on farm only	100 tonnes per hectare	200 tonnes	12 months	A, F
020401, 020399	Soil from cleaning and washing fruit and vegetables only	50 tonnes per hectare	200 tonnes	12 months	A

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020199	Milk from agricultural premises only	50 cubic metres of diluted milk per hectare	200 tonnes	24 hours	A, B, E
100101	Ash from wood chip boilers produced pursuant to an operation described in paragraph U4 only	1 tonne per hectare	10 tonnes	12 months	A
170506	Dredging spoil (other than those mentioned in 170505) generated from the creation or maintenance of habitats, ditches or ponds within parks, gardens, fields and forests only	150 tonnes per hectare	1,250 tonnes	12 months	C
020199	Spent compost from the growing of mushrooms only	50 tonnes per hectare	500 tonnes	12 months	A
190599	Compost produced pursuant to a treatment described in paragraph T23 or T26 only	50 tonnes per hectare	500 tonnes	12 months	A
190604	Digestate produced pursuant to a treatment described in paragraph T24 or T25 only	50 tonnes per hectare	200 tonnes	12 months	A
190812	Waste consisting of biobed or biofilter material produced pursuant to a treatment described in	50 tonnes per hectare	200 tonnes	12 months	A, D

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paragraph T32  
only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste spread does not exceed the limit specified in the third column of the table in sub-paragraph (2) over the period specified in the fifth column,
  - (b) the total quantity of waste stored at any one time does not exceed the limit specified in the fourth column of the table,
  - (c) subject to additional specific conditions D and E in paragraph (f), where they apply, no waste is stored for longer than 12 months prior to spreading,
  - (d) the waste is stored in a secure location prior to spreading,
  - (e) at the time the spreading begins—
    - (i) the land has not been frozen for 12 or more hours in the preceding 24 hours,
    - (ii) the land is not waterlogged, frozen or snow-covered, and
  - (f) the operation complies with such of the following additional specific conditions as are specified in the sixth column of the table—

A	the location of any waste which is stored or land which is spread is at least 10 metres from a watercourse and 50 metres from a spring, well or bore-hole;
B	prior to spreading, the waste is diluted with not less than an equal quantity of water or slurry and the land is spread not more than once in any 4-week period;
C	the waste is spread adjacent to the place from which it was dredged;
D	the waste is stored for at least 12 months prior to spreading;
E	the waste is not stored for longer than 24 hours prior to spreading;
F	the waste is spread at the place where it is produced.

**Spreading waste on non-agricultural land to confer benefit (U11)**

11.—(1) The spreading of relevant waste on land that is not agricultural land for the purposes of providing, maintaining or improving the soil's ability to provide a growing medium by adding nutrients, lime or bio-mass.

(2) The table specifying relevant waste for the purposes of this paragraph and the quantity and storage limits referred to in sub-paragraph (3) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Quantity limit (over 12 months)</i>	<i>Storage limit (at any one time)</i>	<i>(at Additional specific conditions)</i>
010102, 170504	010408, Chalk only	50 tonnes per hectare	200 tonnes	A
020202	Shellfish shells from which the soft tissue or flesh has been removed only	50 tonnes per hectare	200 tonnes	A
020399, 020401	Soil from cleaning and washing fruit and vegetables only	50 tonnes per hectare	200 tonnes	A



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100101	Ash from wood chip boilers produced pursuant to an operation de-scribed in paragraph U4 only	1 tonne per hectare	10 tonnes	A
170506	Dredging spoil (other than those mentioned in 170505) generated from the creation or maintenance of habitats, ditches or ponds within parks, gardens, fields and forests only	150 tonnes per hectare	1,250 tonnes	B
020199	Spent compost from the growing of mushrooms only	50 tonnes per hectare	500 tonnes	A
190599	Compost produced pursuant to a treatment de-scribed in paragraph T23 or T26 only	50 tonnes per hectare	500 tonnes	A
190604	Digestate produced pursuant to a treatment described in paragraph T24 or T25 only	50 tonnes per hectare	200 tonnes	A
190812	Waste consisting of biobed or biofilter material produced pursuant to a treatment described in paragraph T32 only	50 tonnes per hectare	200 tonnes	A, C
200108	Coffee grounds only	50 tonnes per hectare	200 tonnes	A

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste spread does not exceed the limit specified in the third column of the table in sub-paragraph (2) over any 12-month period,
- (b) the total quantity of waste stored at any one time does not exceed the limit specified in the fourth column of the table,
- (c) subject to additional specific condition C in paragraph (f), where it applies, no waste is stored for longer than 12 months prior to spreading,
- (d) the waste is stored in a secure location prior to spreading,
- (e) at the time the spreading begins—

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- (i) the land has not been frozen for 12 or more hours in the preceding 24 hours;
- (ii) the land is not waterlogged, frozen or snow-covered, and
- (f) the operation complies with such of the following additional specific conditions as are specified in the fifth column of the table—

A	the location of any waste which is stored or land which is spread is at least 10 metres from a watercourse and 50 metres from a spring, well or borehole;
B	the waste is spread adjacent to the place from which it was dredged;
C	the waste is stored for at least 12 months prior to spreading.

**Use of mulch (U12)**

- 12.—(1) The use of relevant waste as a mulch.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
020103, 191207, 200201	Untreated wood and plant matter

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste used or stored over any period of 1 month does not exceed 100 tonnes, and
  - (b) the waste is stored in a secure location prior to use.

**Spreading of plant matter to confer benefit (U13)**

- 13.—(1) The spreading of relevant waste at the place of production to confer benefit.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
020103, 020107, 020304, 200201	Plant tissue only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste spread over any 12-month period does not exceed 50 tonnes per hectare,
  - (b) at the time the spreading begins—
    - (i) the land has not been frozen for 12 or more hours in the preceding 24 hours;
    - (ii) the land is not waterlogged, frozen or snow-covered, and
  - (c) except for waste which is spread on the banks of the waters from which it was produced, no waste is spread within 50 metres of any watercourse, spring, well or borehole.

**Incorporation of ash into soil (U14)**

- 14.—(1) The incorporation of ash which is relevant waste into soil resulting from a qualifying operation.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

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<i>Codes</i>	<i>Waste Types</i>
020103, 020107, 200201	Ash from burning of plant tissue only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste incorporated into soil does not exceed 10 tonnes per hectare, and
  - (b) ashes of burnt cereal, straw or cereal stubble are not allowed, without reasonable excuse, proof of which lies on the establishment or undertaking carrying on the operation, to remain on the soil for longer than 24 hours after the commencement of the burning but must be incorporated into the soil—
    - (i) within that period, or
    - (ii) in a case where, having regard to wind conditions to do so would be likely to cause nuisance, as soon as conditions allow.
- (4) For the purposes of this paragraph, a “qualifying operation” is one that—
- (a) involves the burning of cereal straw or cereal stubble,
  - (b) falls within a description in paragraph D7, and
  - (c) complies with the specific conditions specified in that paragraph and the general conditions specified in Chapter 3.

#### **Pig and poultry ash (U15)**

- 15.—(1) The spreading of relevant waste on agricultural land at the place of production.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
190112	Ash from the incineration of pig and poultry carcasses only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste spread over any 12-month period does not exceed 150kg per hectare,
  - (b) the waste is mixed with an equal volume or more of manure or slurry prior to spreading,
  - (c) the waste is stored in a secure place prior to spreading,
  - (d) the location of the waste which is stored or land which is spread is at least—
    - (i) 10 metres from a watercourse;
    - (ii) 50 metres from a spring, well or borehole, and
  - (e) at the time of the spreading—
    - (i) the land has not been frozen for 12 or more hours in the preceding 24 hours;
    - (ii) the land is not waterlogged, frozen or snow-covered.

#### **Use of depolluted end-of-life vehicles for vehicle parts (U16)**

- 16.—(1) The use of relevant waste for vehicle parts.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste Types</i>
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160106	End-of-life vehicles, containing neither liquids nor other hazardous components
160122	Non-hazardous components from end-of-life vehicles only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) no more than two depolluted end-of-life vehicles are stored at any one time,
  - (b) in relation to relevant waste to which code 160122 (non-hazardous components from end-of-life vehicles) applies, the total quantity of waste stored at any one time does not exceed 5 cubic metres,
  - (c) the waste is stored in a secure place,
  - (d) the waste is stored on an impermeable surface, and
  - (e) the operation is for the purposes of re-using the waste.

(4) In this paragraph—

“depolluted” means that the vehicle has been subjected to all of the operations described in paragraph 3 of Annex 1 to the End-of-Life Vehicles Directive;

[<sup>F93</sup>“end-of-life vehicle” means a motor vehicle which is waste within the meaning of Article 3(1) of the Waste Framework Directive, as read with Articles 5 and 6 of that Directive.]

**Textual Amendments**

**F93** Words in Sch. 3 Pt. 1 Ch. 2 substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(9)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

CHAPTER 3

Treatment of waste

SECTION 1

Introductory

1.—(1) The descriptions in this Chapter—

- (a) are set out in the first sub-paragraph of paragraphs T1 to [<sup>F94</sup>T33], and
- (b) include associated storage.

(2) The specific conditions for each description in this Chapter are set out in the third sub-paragraph of paragraphs T1 to [<sup>F95</sup>T33].

(3) The general condition for the descriptions in this Chapter is that the operation is for the purposes of recovering the waste, unless otherwise stated in the specific conditions.

**Textual Amendments**

**F94** Word in Sch. 3 Ch. 3 s. 1 para. 1(1)(a) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(b)(i)(aa)**

**F95** Word in Sch. 3 Ch. 3 s. 1 para. 1(2) substituted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(b)(i)(bb)**

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## SECTION 2

### Descriptions and specific conditions

#### Cleaning, washing, spraying or coating relevant waste (T1)

1.—(1) The treatment of relevant waste by cleaning, washing, spraying or coating it, subject to sub-paragraph (4).

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
150105	Composite packaging
160120, 150107, 170202, 191205, 200102	Glass
150101	Paper and cardboard packaging
020104, 070213, 150102, 160119, 170203, 200139	Plastic
150109	Textile packaging

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated over any 7-day period does not exceed 300 tonnes,
- (b) subject to paragraph (e), the total quantity of waste stored at any one time does not exceed 300 tonnes,
- (c) the waste is stored and treated in a location with sealed drainage,
- (d) no waste is stored for longer than 3 months prior to treatment,
- (e) where the waste consists of containers that have been used to contain a hazardous substance, the total quantity of waste stored does not exceed 1 tonne over any 7-day period, and
- (f) the waste is not contaminated by more than 1% of its original volume prior to treatment.

(4) The description in sub-paragraph (1) does not include cleaning, washing, spraying or coating of any relevant waste if this falls within Part B of Section 6.4 of Part 2 of Schedule 1.

(5) In this paragraph, “hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in Parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures<sup>M60</sup>.

(6) References in this paragraph to quantity limits by weight include the weight of any contamination.

#### Marginal Citations

**M60** OJ No L 353, 31.12.2008, p 1, as last amended by Commission Regulation (EU) No 1297/2014 (OJ No L 350, 6.12.2014, p 1).

#### Recovery of textiles (T2)

2.—(1) The treatment of relevant waste by laundering or otherwise cleaning it.

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(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
191208	Textiles
200110	Clothes
200111	Textiles

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored at any one time does not exceed 20,000 tonnes, and
- (b) the waste is treated and stored at a location with sealed drainage.

**Treatment of waste metals and metal alloys by heating for the purposes of removing grease etc. (T3)**

3.—(1) The treatment of relevant waste for the purposes of removing grease, oil or any other non-metallic contaminant by heating it in an appliance where the requirements of sub-paragraph (4) are met using a process that is not an excluded process.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
160117	Ferrous metal
160118	Non-ferrous metal
191001	Iron and steel waste
191002	Non-ferrous waste
191202	Ferrous metal
191203	Non-ferrous metal
200140	Metals

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste stored or treated at any one time does not exceed 10 tonnes, and
- (b) the waste is stored in a secure location with sealed drainage.

(4) The requirements in this sub-paragraph are that—

- (a) the appliance has a net rated thermal input of less than 0.2 megawatts, and
- (b) where it is used together with other appliances (whether or not it is operated simultaneously with such other appliances), the aggregate net rated thermal input of all the appliances is less than 0.2 megawatts.

(5) The processes that are excluded processes for the purposes of sub-paragraph (1) are—

- (a) the removal by heat of plastic or rubber covering from scrap cable or any asbestos contaminant,
- (b) a process that is an activity listed in Section 2.1 (other than paragraph (d) of Part B) of Part 2 of Schedule 1 involving the heating of iron, steel or ferrous alloy, and

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- (c) a process that is an activity described in Part A(1) or A(2) of Section 2.2 of Chapter 2 of Part 2 of Schedule 1 involving the heating of any non-ferrous metal or non-ferrous metal alloy.

**Preparatory treatments (baling, sorting, shredding etc.) (T4)**

4.—(1) The treatment of relevant waste by baling, sorting, shredding, pulverising, densifying, crushing or compacting it.

(2) The table specifying relevant waste for the purposes of this paragraph and the quantity limits referred to in sub-paragraph (3) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Treatment limit (over 7 days)</i>	<i>Storage limit (at any one time)</i>
150104, 200140	Cans and foils only	100 tonnes where treatment is carried on outdoors 500 tonnes where treatment is carried on indoors	500 tonnes
070213, 150102, 150105	Food and drink cartons only	100 tonnes where treatment is carried on outdoors 3,000 tonnes where treatment is carried on indoors	500 tonnes
150107, 160120, 170202, 191205, 200102	Glass	5,000 tonnes	5,000 tonnes
030308, 030307, 150101, 191201, 200101	Paper and cardboard (excluding food and drink cartons)	500 tonnes where treatment is carried on outdoors 3,000 tonnes where treatment is carried on indoors	15,000 tonnes
020104, 070213, 120105, 150102, 160119, 170203, 191204, 200139	Plastic	100 tonnes where treatment is carried on outdoors 3000 tonnes where treatment is carried on indoors	500 tonnes
040222, 150109, 191208, 200110, 200111	Textiles and clothes	1,000 tonnes where treatment is carried on outdoors 3,000 tonnes where treatment is carried on indoors	1,000 tonnes

(3) For the purposes of this paragraph, the specific conditions are that—

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- (a) subject to paragraph (d), the total quantity of waste treated over any 7-day period does not exceed the limit specified in the third column of the table in sub-paragraph (2),
- (b) the total quantity of waste stored at any one time does not exceed the limit specified in the fourth column of the table,
- (c) no waste is stored for longer than 12 months,
- (d) where the treatment involves pulverising waste—
  - (i) the total quantity of waste treated over any 7-day period does not exceed 5 tonnes;
  - (ii) the treatment is carried on indoors,
- (e) where the treatment involves densifying waste, the treatment does not involve the application of heat,
- (f) the treatment and storage are carried on in a secure place,
- (g) the waste arrives at the place where the operation is carried on unmixed with any other type of waste,
- (h) the waste is treated and stored in an unmixed state, and
- (i) in relation to relevant waste to which any one of codes 030308, 030307, 150101, 191201, 200101 (paper and cardboard) applies—
  - (i) the waste is stored in a baled form, in a container or indoors;
  - (ii) within the storage limit specified in the fourth column of the table, up to 1,000 tonnes may be stored outdoors so long as it is stored in an enclosure designed and maintained to prevent the escape of litter.

#### Screening and blending of waste (T5)

5.—(1) The treatment of relevant waste by screening and blending it for the purposes of producing an aggregate or soil and associated prior treatment.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
010408	Waste gravel and crushed rocks other than those mentioned in 010407
010409	Waste sand and clays
020202	Shellfish shells from which the soft tissue or flesh has been removed only
030101	Untreated waste bark and cork only
030301	Untreated waste bark and wood
100101	Bottom ash, slag and boiler dust (excluding boiler dust mentioned in 100104)
100115	Bottom ash, slag and boiler dust from co-incineration other than those mentioned in 100114
170101	Concrete
170102	Bricks
170103	Tiles and ceramics
170107	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 170106



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170201	Untreated wood only
170302	Bituminous mixtures other than those mentioned in 170301
170504	Soil and stones other than those mentioned in 170503
170506	Dredging spoil other than those mentioned in 170505
170508	Track ballast other than those mentioned in 170507
190599	Compost produced pursuant to a treatment described in paragraphs T23 or T26 only
191205	Glass
191209	Aggregates only
191212	Gypsum recovered from construction materials only
191302	Solid wastes from soil remediation other than those mentioned in 191301
191304	Sludges from soil remediation other than those mentioned in 191303
200202	Soil and stones

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) in relation to any relevant waste to which code 170302 (bituminous mixtures other than those mentioned in 170301) applies where the treatment is for the purpose of manufacturing roadstone, the total quantity of waste treated or stored over any 3-year period does not exceed 50,000 tonnes,
- (b) in relation to relevant waste not covered by paragraph (a), the total quantity of waste treated or stored over any 3-year period does not exceed 5,000 tonnes,
- (c) no waste is stored for longer than 12 months, and
- (d) the treatment is carried on at the place—
  - (i) of production, or
  - (ii) where the treated waste is to be used.

(4) In this paragraph, “associated prior treatment” means crushing relevant waste for the purposes of screening or blending it but does not include crushing of any relevant waste which falls within Part B of Section 3.5 of Part 2 of Schedule 1 or within paragraph T7.

**Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising (T6)**

- 6.—(1) The treatment of relevant waste by chipping, shredding, cutting or pulverising it.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103, 200201	Plant tissue waste
030101, 030301, 170201	Wood
150103	Wooden packaging only

(3) For the purposes of this paragraph, the specific conditions are that—

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- (a) the total quantity of waste treated or stored over any 7-day period does not exceed 500 tonnes, and
- (b) no waste is stored for longer than 3 months after treatment.

**Treatment of waste bricks, tiles and concrete by crushing, grinding or reducing in size (T7)**

7.—(1) The treatment of relevant waste by crushing, grinding or reducing it in size but not including any treatment activity covered by paragraph (c) in Part B of Section 3.5 of Part 2 of Schedule 1.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
170101	Concrete
170102	Bricks
170103	Tiles and ceramics
170107	Mixtures of concrete, bricks, tiles and ceramics (other than those mentioned in 170106*)

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste treated over any period of 1 hour does not exceed 20 tonnes,
  - (b) the total quantity of waste stored at any one time does not exceed 200 tonnes,
  - (c) the waste is stored in a secure place prior to treatment,
  - (d) the treatment is carried on—
    - (i) at the place of production, or
    - (ii) at the place where the treated waste is to be used, and
  - (e) the operation does not result in the release into the air of a substance listed in paragraph 6(3) of Part 1 of Schedule 1 except in a quantity which is so trivial that it is incapable of causing pollution or its capacity to cause pollution is insignificant.

**Mechanical treatment of end-of-life tyres (T8)**

8.—(1) The treatment of end-of-life tyres, including such tyres in a shredded or granulated form that are relevant waste by a relevant treatment operation and associated prior treatment.

(2) The table specifying relevant waste and relevant treatment operations for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Relevant treatment operation</i>
160103	End-of-life tyres	Granulating, baling, peeling, shaving, shredding and re-treading of tyres
191204	Shredded or granulated end-of-life tyres only	Granulating

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste stored or treated over any 7-day period does not exceed—
    - (i) 60 tonnes of truck tyres, or

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- (ii) 40 tonnes of any other tyres,
  - (b) within the limits in paragraph (a), the total quantity stored together does not exceed 10 tonnes,
  - (c) in relation to any relevant treatment operation that is granulating, the treatment is carried on indoors, and
  - (d) in relation to any relevant treatment operation that is re-treading, the treatment is for the purposes of re-using the waste.
- (4) In this paragraph, “associated prior treatment” means cleaning tyres and separating rims from them prior to treatment.

### Recovery of scrap metal (T9)

- 9.—(1) The recovery of scrap metal consisting of relevant waste by—
- (a) sorting, grading, shearing by manual feed, baling or crushing it, or
  - (b) cutting it with hand-held equipment.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020110	Waste metal
150104	Metallic packaging
160117, 191202	Ferrous metal
160118, 191203	Non-ferrous metal
170401	Copper, bronze, brass
170402	Aluminium
170403	Lead
170404	Zinc
170405	Iron and steel
170406	Tin
170407	Mixed metals
170411	Cables other than those mentioned in 170410
200140	Metals

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste treated or stored at any one time does not exceed 1,000 tonnes,
  - (b) within the limit in paragraph (a), the total quantity of any cables stored or treated does not exceed 50 tonnes,
  - (c) no waste is stored for longer than 24 months,
  - (d) the recovery is carried on at a location with sealed drainage, and
  - (e) the height of any pile or stack of waste does not exceed 5 metres.

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### Sorting mixed waste (T10)

- 10.—(1) The sorting of one type of relevant waste from one or more other types of relevant waste.  
(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
150101, 200101	Paper and cardboard
150102, 200139	Plastics
150104, 200140	Metals
150105	Composite packaging
150106	Mixed packaging
150107, 200102	Glass
150109, 200110, 200111	Textiles and clothing only

- (3) For the purposes of this paragraph, the specific conditions are that—
- the total quantity of waste stored at any one time does not exceed 10 tonnes,
  - the total quantity of waste treated over any 7-day period does not exceed 10 tonnes, and
  - the waste is stored in a secure place.

### Repair or refurbishment of WEEE (T11)

- 11.—(1) The treatment of WEEE that is relevant waste by repairing, refurbishing or dismantling it.  
(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
160211*	WEEE containing CFCs, HCFCs and HFCs
160213*	WEEE containing hazardous components other than those mentioned in 160209 to 160212
160214	WEEE other than those mentioned in 160209 to 160213
160216	Components removed from discarded equipment other than those mentioned in 160215
200123*	WEEE containing CFCs
200135*	WEEE other than those mentioned in 200121 and 200123 containing hazardous components
200136	WEEE other than those mentioned in 200121, 200123, and 200135

- (3) For the purposes of this paragraph, the specific conditions are that—
- the total quantity of waste treated or stored over any 12-month period does not exceed 1,000 tonnes,
  - best available treatment, recovery and recycling techniques are used,
  - the waste is stored in accordance with paragraph 1 of Annex VIII to the WEEE Directive,
  - the waste is treated in accordance with paragraph 2 of Annex VIII to the WEEE Directive,

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- (e) the minimum recovery targets set out in Annex V to the WEEE Directive are met,
  - (f) the operation meets the technical requirements specified in Annex VIII to the WEEE Directive,
  - (g) in relation to any relevant waste falling within codes 160211\* (WEEE containing CFCs, HCFCs and HFCs) or 200123\* (WEEE containing CFCs), the waste is stored in such a manner so as to prevent the release of CFCs, HCFCs and HFCs,
  - (h) the waste is stored in such a manner that its environmentally sound re-use or recycling is not hindered,
  - (i) the operation is for the purposes of—
    - (i) re-using the WEEE for its original purpose,
    - (ii) re-using any dismantled components for their original purpose, or
    - (iii) dismantling the WEEE components for the purposes of recovery, and
  - (j) in relation to dismantling, any fluids are removed and further treatment carried out in accordance with Annex VII to the WEEE Directive.
- (4) In this paragraph—
- “best available treatment, recovery and recycling techniques” has the meaning given in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE)”<sup>M61</sup>;
- “CFCs” means chlorofluorocarbons;
- “HCFCs” means hydrochlorofluorocarbons;
- “HFCs” means hydrofluorocarbons;
- “treatment” does not include the degassing or capture of ozone depleting substances.

**Marginal Citations**

**M61** See <http://archive.defra.gov.uk/environment/waste/producer/electrical/documents/weee-batrtrt-guidance.pdf>. A copy may be obtained from the Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY.

**Manual treatment of waste (T12)**

- 12.—(1) The manual treatment of relevant waste by a relevant treatment operation.
- (2) The table below specifies—
- (a) relevant waste for the purposes of this paragraph and relevant treatment operations,
  - (b) the quantity limits referred to in sub-paragraph (3)(a), and
  - (c) the additional specific conditions referred to in sub-paragraph (3)(c).

<i>Codes</i>	<i>Waste types</i>	<i>Relevant treatment operation</i>	<i>Quantity limits (at any one time)</i>	<i>Additional specific conditions</i>
200199	Bicycles only	Sorting, repairing or refurbishing	100 tonnes	A

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200110, 200111	Clothing, fabrics, carpets only	Sorting, repairing or refurbishing	100 tonnes	A
200138, 200139, 200140	Coat hangers only	Sorting and dismantling	100 tonnes	B
200140	Domestic pots and pans only	Sorting and dismantling	100 tonnes	
200199	Footwear only	Sorting, repairing or refurbishing	100 tonnes	A
200307	Furniture only	Sorting, repairing or refurbishing	100 tonnes	A
200138, 200139, 200140	Garden tools only	Sorting, repairing or refurbishing	100 tonnes	A
200138, 200139, 200140	Lock gates only	Sorting and dismantling	100 tonnes	
200307	Mattresses only	Sorting and dismantling	5 tonnes	B, C
170102, 170201, 170904, 200138	Stone, bricks, wood only	Sorting, repairing or refurbishing	500 tonnes	A
200137*, 200138, 200140	Telegraph poles only	Sorting and dismantling	100 tonnes	B
170201, 170202, 170203, 200102, 200138, 200139, 200140	Windows, doors only	Sorting, repairing or refurbishing	100 tonnes	A
170201, 170202, 170203, 200102, 200138, 200139, 200140	Windows, doors only	Sorting and dismantling	10 tonnes	B
150103	Wooden pallets only	Sorting, repairing or refurbishing	100 tonnes	A
150103	Wooden pallets only	Sorting and dismantling	100 tonnes	B

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored at any one time does not exceed the limit specified in the fourth column of the table in sub-paragraph (2),
- (b) subject to additional specific condition B in paragraph (c), where it applies, no waste is stored for longer than 2 years, and
- (c) the operation complies with such of the following additional specific conditions as is specified in the fifth column of the table—

A	the operation is for the purposes of reusing the waste;
B	no waste is stored for longer than 12 months;
C	treatment and storage are carried on indoors.

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### Treatment of waste food (T13)

13.—(1) The treatment of waste food that is relevant waste by decanting or unwrapping it, bulking it up and sorting it.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020304, 020501, 020601, 020704	Materials unsuitable for consumption or processing
200199	Non liquid foods unsuitable for consumption or processing only

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored at any one time does not exceed 30 tonnes,
- (b) the treatment and storage are carried on—
  - (i) indoors;
  - (ii) in a secure place,
- (c) no waste is stored for longer than 7 days,
- (d) in relation to relevant waste specified in the first row of the table in sub-paragraph (2), where that is milk only, the operation is carried on in a dairy which has sealed drainage, and
- (e) any resultant waste packaging is bulked up for the purposes of recovery.

### Crushing and emptying waste vehicle oil filters (T14)

14.—(1) The treatment of waste vehicle oil filters consisting of relevant waste by crushing and emptying them.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
160107*	Oil filters

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste stored after treatment does not exceed 1 tonne of crushed and emptied oil filters at any one time,
- (b) the treatment is carried on at the place of production,
- (c) the equipment used to treat the waste is—
  - (i) designed for the purposes of crushing oil filters;
  - (ii) designed and maintained to ensure that oil does not escape during treatment, and
- (d) the treatment takes place as soon as practicable after the oil filter is removed from a vehicle.

### Treatment of waste aerosol cans (T15)

15.—(1) The treatment of empty used waste aerosol cans consisting of relevant waste by puncturing and crushing them.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
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160504*	Aerosol cans containing residues of or contaminated by hazardous substances only
160505	Aerosol cans only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste treated or stored in any 12-month period does not exceed 3,000 cans,
  - (b) the waste is stored in a secure location in vented containers prior to treatment,
  - (c) the treatment and storage are carried on—
    - (i) at the place of production;
    - (ii) in a well-ventilated area, and
  - (d) the equipment used to treat the waste is designed for that purpose.

**Treatment of waste toner cartridges and waste ink cartridges by sorting, dismantling, cleaning or refilling (T16)**

16.—(1) The treatment of waste toner cartridges and waste ink cartridges consisting of relevant waste by sorting, dismantling, cleaning or refilling them.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
080313	Waste ink other than that mentioned in 080312*
080318	Waste printing toner other than those mentioned in 080317
150102	Plastic packaging
160216	Cartridges taken from discarded equipment other than those mentioned in 160215 only
200139	Plastics

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste treated or stored at any one time does not exceed 150 tonnes, and
  - (b) the treatment is carried on—
    - (i) indoors;
    - (ii) at a location with sealed drainage.

**Crushing waste fluorescent tubes (T17)**

17.—(1) The crushing of relevant waste for the purposes of volume reduction prior to collection.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
200121*	Fluorescent tubes only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the fluorescent tubes were used or intended to be used by the producer of the waste before becoming waste,



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- (b) the crushing is carried out by the producer of the waste at the place of production,
  - (c) the total quantity of waste crushed does not exceed 2 tonnes per year,
  - (d) the equipment used for crushing is owned by the producer,
  - (e) the mercury exposure limit is not exceeded,
  - (f) best available treatment, recovery and recycling techniques are used,
  - (g) the waste is stored in accordance with paragraph 1 of Annex VIII to the WEEE Directive, and
  - (h) the waste is crushed in accordance with paragraph 2 of Annex VIII to the WEEE Directive.
- (4) In this paragraph—
- “best available treatment, recovery and recycling techniques” has the meaning given in paragraph 11(4) of this Section;
- “mercury exposure limit” means the workplace exposure limit for mercury set out in the document entitled “EH/40/2005 Workplace Exposure Limits” (second edition) issued by the Health and Safety Executive and published in 2011 <sup>M62</sup>.

**Marginal Citations**

**M62** See <http://www.hse.gov.uk/pubns/priced/eh40.pdf>. A copy may be obtained by writing to Health and Safety Executive Books at PO Box 1999, Sudbury, Suffolk CO10 2WA or via <https://books.hse.gov.uk/hse/public/home.jsf>.

**Dewatering using flocculants (T18)**

- 18.—(1) The treatment of relevant waste by dewatering using flocculants.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
010409	Clay effluent resulting from the manufacture of ceramics only
080120	Water based paint wash waters only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste stored or treated at any one time does not exceed 30,000 litres, and
  - (b) the waste is stored in a container with secondary containment.

**Physical and chemical treatment of waste edible oil and fat to produce biodiesel (T19)**

- 19.—(1) The physical and chemical treatment of relevant waste for the purposes of producing biodiesel.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
200125	Edible oil and fat

- (3) For the purposes of this paragraph, the specific conditions are that—

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- (a) the total quantity of waste physically treated or stored at any one time does not exceed 5,000 litres,
- (b) the total quantity of waste chemically treated at any one time does not exceed 250 litres,
- (c) the waste is treated and stored in a container with secondary containment,
- (d) no waste is stored for longer than 3 months, and
- (e) the operation is for the purpose of reusing the waste.

**Treatment of waste at a water treatment works (T20)**

- 20.—(1) The treatment of relevant waste at a water treatment works.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
190902	Sludges from water clarification
190903	Sludges from decarbonation
190906	Solutions and sludges from regeneration of ion exchangers
190999	Waste water and bore hole flushings only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste treated at the works over any period of 12 months does not exceed 10,000 cubic metres, and
  - (b) the waste is treated and stored in a secure location with sealed drainage.

**Recovery of waste at a waste water treatment works (T21)**

- 21.—(1) The recovery of relevant waste at a waste water treatment works.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
190801	Screenings
190802	Sewage grit (waste from desanding) only
190805	Sludges from treatment of urban waste water
190899	Centrate liquor only
190902	Sludges from water clarification
190903	Sludges from decarbonation
190906	Solutions and sludges from regeneration of ion exchangers
200304	Septic tank sludge
200306	Waste from sewage cleaning
200399	Cesspool waste and other sewage sludge only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste brought to the works over any period of 12 months does not exceed 100,000 cubic metres, and

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- (b) the waste is treated and stored in a secure location with sealed drainage.

**Recovery of central heating oil by filtration**

**F96** 22. ....

**Textual Amendments**

**F96** Sch. 3 Ch. 3 s. 2 para. 22 omitted (1.10.2020) by virtue of [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(b)(ii)(aa)**

**Aerobic composting and associated prior treatment (T23)**

- 23.—(1) The treatment of relevant waste by aerobic composting and associated prior treatment.
- (2) The tables specifying relevant waste for the purposes of this paragraph are set out below.

**Table 1**

<i>Codes</i>	<i>Waste types</i>
170506	Plant tissue waste from inland waters only
020103, 200201	Plant tissue waste
020106	Horse manure and farmyard manure only
020107	Biodegradable waste from forestry only
020199	Fully biodegradable animal bedding
200101	Paper and cardboard
200201	Biodegradable waste plant matter only

**Table 2**

<i>Codes</i>	<i>Waste types</i>
020202	Animal tissue waste
020501, 020601	Materials unsuitable for consumption or processing
200108	Biodegradable kitchen and canteen waste
200302	Biodegradable waste from markets only

- (3) For the purposes of this paragraph, the specific conditions are—
  - (a) the total quantity of waste treated or stored at any one time does not exceed 80 tonnes where—
    - (i) the operation is carried on at the place of production, and
    - (ii) the treated waste is being or is to be used at that place,
  - (b) the total quantity of waste treated or stored at any one time does not exceed 60 tonnes where—
    - (i) the waste is produced at a place other than where the operation is carried on, or
    - (ii) the treated waste is not to be used at the place where the operation is carried on,

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- (c) within the quantity limits in paragraphs (a) and (b), the waste does not consist at any one time of more than the following quantities—
    - (i) 10 tonnes of paper or cardboard;
    - (ii) 20 tonnes of manure;
    - (iii) 10 tonnes of any relevant waste listed in Table 2,
  - (d) in relation to relevant waste listed in Table 1, no waste is stored for longer than 1 month prior to treatment,
  - (e) in relation to relevant waste listed in Table 2, no waste is stored for longer than 7 days prior to treatment,
  - (f) no waste is stored for a period of longer than 12 months after treatment, and
  - (g) the treatment results in a stable sanitised material that can be applied to land for the benefit of agriculture or to improve the soil structure or nutrients in land.
- (4) In this paragraph—
- “aerobic composting” means the autothermic and thermophilic biological decomposition and stabilisation of biodegradable waste under controlled conditions that are aerobic;
- “associated prior treatment” means screening, chipping, shredding, cutting, pulverising or sorting waste for the purposes of aerobic composting.

**Anaerobic digestion at premises used for agriculture and burning of resultant biogas (T24)**

- 24.—**(1) The treatment by anaerobic digestion of relevant waste at premises used for agriculture and associated prior treatment and the burning of any resultant biogas.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103, 020107, 170506, 200201	Plant tissue waste
020106	Horse and farmyard manure, slurry only
020199	Fully biodegradable animal bedding

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste treated or stored at any one time does not exceed 1,250 cubic metres,
  - (b) the minimum retention time for the waste in the digester is 28 days, and
  - (c) any gas resulting from the operation is collected and then burnt in an appliance—
    - (i) where the requirements of sub-paragraph (5) are met, and
    - (ii) the appliance is for the purposes of producing energy.
- (4) In this paragraph, “associated prior treatment” means screening, chipping, shredding, cutting, pulverising or sorting waste for the purposes of anaerobic digestion.
- (5) The requirements in this sub-paragraph are that—
- (a) the appliance has a net rated thermal input of less than 0.4 megawatts, and
  - (b) where it is used together with other appliances (whether or not it is operated simultaneously with such other appliances), the aggregate net rated thermal input of all the appliances is less than 0.4 megawatts.

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### Anaerobic digestion at premises not used for agriculture and burning of resultant biogas (T25)

25.—(1) The treatment by anaerobic digestion of relevant waste at premises not used for agriculture and associated prior treatment and the burning of any resultant biogas.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103, 020107, 170506, 200201	Plant tissue waste
020106	Horse and farmyard manure only
020199	Fully biodegradable animal bedding
200101	Paper and cardboard
200108	Biodegradable kitchen and canteen waste
020202	Animal tissue waste
020501, 020601	Materials unsuitable for consumption or processing
200302	Biodegradable waste from markets only

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored at any one time does not exceed 50 cubic metres,
- (b) the minimum retention time for the waste in the digester is 28 days, and
- (c) any gas resulting from the operation is collected and then burnt in an appliance—
  - (i) where the requirements of sub-paragraph (5) are met, and
  - (ii) the appliance is for the purposes of producing energy.

(4) In this paragraph, “associated prior treatment” means screening, chipping, shredding, cutting, pulverising or sorting waste for the purposes of anaerobic digestion.

(5) The requirements in this sub-paragraph are that—

- (a) the appliance has a net rated thermal input of less than 0.4 megawatts, and
- (b) where it is used together with other appliances (whether or not it is operated simultaneously with such other appliances), the aggregate net rated thermal input of all the appliances is less than 0.4 megawatts.

### Treatment of kitchen waste in a wormery (T26)

26.—(1) The treatment in a wormery of relevant waste originating from a kitchen.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
200101	Paper and cardboard
200108	Biodegradable kitchen and canteen waste

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated over any 12-month period does not exceed 6 tonnes, and
- (b) the treatment results in a stable sanitised vermicompost that can be applied to land for the benefit of agriculture or to improve the soil structure or nutrients in land.

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### Treatment of sheep dip using organophosphate-degrading enzyme (T27)

27.—(1) The treatment of used organophosphate sheep dip consisting of relevant waste for the purposes of its disposal.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020109	Organophosphate sheep dip only

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) total quantity of waste treated or stored over any 24-hour period does not exceed 8,000 litres,
- (b) the waste is treated using organophosphate-degrading enzyme in accordance with the enzyme manufacturer's instructions,
- (c) the treatment and storage are carried on at the place of production, and
- (d) the treatment is carried on in a secure container located within a drain pen or in a secure sheep dip bath.

(4) In this paragraph, “drain pen” means an impermeable area draining back to the sheep dip bath where newly-dipped sheep are held while they continue to drip.

### Sorting and de-naturing of controlled drugs for disposal (T28)

28.—(1) The treatment of controlled drugs consisting of relevant waste by sorting and de-naturing them prior to their disposal.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
180109	Medicines from natal care, diagnosis, treatment or prevention of disease in humans
180208	Medicines from research, diagnosis, treatment or prevention of disease involving animals
200132	Medicines separately collected as municipal waste

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored at any one time does not exceed 1 cubic metre,
- (b) the treatment and storage are carried on at the place of production, and
- (c) no waste is stored for longer than 6 months.

(4) In this paragraph, “controlled drug” means a controlled drug specified in Schedules 1 to 5 to the Misuse of Drugs Regulations 2001<sup>M63</sup>.

#### Marginal Citations

**M63** S.I. 2001/3998; relevant amending instruments are S.I. 2003/1432, 2005/1653, 2864, 3372, 2007/2154, 2009/3136, 2010/1144, 1799, 2011/448, 2012/973, 1311, 2013/176, 625, 2014/1275, 1377, 3277, 2015/231 and 891.

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### Treatment of non-hazardous pesticide washings by carbon filtration for disposal (T29)

29.—(1) The treatment of non-hazardous pesticide washings that are relevant waste by carbon filtration for the purposes of disposal.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020109, 160509	Non-hazardous pesticide washings only

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored over any 24-hour period does not exceed 8,000 litres,
- (b) the treatment and storage are carried on at the place of production, and
- (c) the treatment is carried on in a location with sealed drainage.

### Recovery of silver (T30)

30.—(1) The recovery of silver from relevant waste produced in connection with printing or photographic processes.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
090106*	Wastes containing silver from on-site treatment of photographic wastes
090107	Photographic film or paper containing silver or silver compounds

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste stored or treated at any one time does not exceed 1,000 litres, and
- (b) the treatment and storage are carried on in a location with sealed drainage.

### Recovery of monopropylene glycol from aircraft antifreeze fluids (T31)

31.—(1) The recovery of monopropylene glycol by filtering and distilling relevant waste collected following de-icing of aircraft.

(2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
160115	Antifreeze fluids other than those mentioned in 160114

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste treated or stored over any 7-day period does not exceed 250 cubic metres,
- (b) the waste is treated in a location with sealed drainage,
- (c) the operation is carried on at the place where the waste is produced, and
- (d) the waste is stored with secondary containment.

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**Treatment of waste in a biobed or biofilter (T32)**

- 32.—(1) The treatment of relevant waste in a lined biobed or above ground biofilter.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020109, 160509	Non-hazardous pesticide washings only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste treated or stored over any 12-month period does not exceed 15,000 litres,
  - (b) the biobed or biofilter is located at a secure place that is—
    - (i) at least 10 metres from a watercourse;
    - (ii) at least 50 metres from a spring or well or from any borehole not used to supply water for domestic or food production purposes;
    - (iii) at least 250 metres from any borehole used to supply water for domestic or food production purposes;
    - (iv) not within a zone defined by a 50-day travel time for groundwater to reach a groundwater abstraction that is used to supply water for domestic or food production purposes,
  - (c) the biobed or biofilter—
    - (i) is designed and maintained for the treatment operation;
    - (ii) has an impermeable lining, and
  - (d) the treatment is carried on at the place of production.

**[<sup>F97</sup>Recovery of central heating oil by filtration (T33)]**

- 33.—(1) The recovery of central heating oil by filtering relevant waste.
- (2) The table specifying relevant waste for the purpose of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
130701*	Central heating oil only

- (3) For the purpose of this paragraph, the specific conditions are that—
  - (a) the total quantity of the waste treated over any 7 day period does not exceed 400 litres,
  - (b) the waste is stored with secondary containment,
  - (c) the treatment is carried on at a location with sealed drainage, and
  - (d) the operation is for the purpose of reusing the waste.]

**Textual Amendments**

**F97** Sch. 3 Ch. 3 s. 2 para. 33 inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(4)(b)(ii)(bb)**



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## CHAPTER 4

### Disposal of waste

#### SECTION 1

##### Introductory

- 1.—(1) The descriptions in this Chapter—
- (a) are set out in the first sub-paragraph of paragraphs D1 to D8, and
  - (b) include associated storage.
- (2) The specific conditions for each description in this Chapter are set out in the third sub-paragraph of paragraphs D1 to D8.
- (3) The general condition for all descriptions in this Chapter is that the operation is carried on at the place of production.

#### SECTION 2

##### Descriptions and specific conditions

#### **Deposit of waste from dredging of inland waters (D1)**

- 1.—(1) The deposit of relevant waste arising from the dredging of inland waters and associated screening and dewatering.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
170506	Dredging spoil other than those mentioned in 170505

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste deposited or treated over any 12-month period does not exceed 50 cubic metres for each metre of land on which the waste is deposited, and
  - (b) the waste is deposited at the closest possible point to where the waste was produced on—
    - (i) the bank of the inland waters from which the waste was produced, or
    - (ii) such width of land adjoining the inland waters so as to enable the waste to be removed and deposited by mechanical means in one operation.

#### **Deposit of waste from a railway sanitary convenience (D2)**

- 2.—(1) The deposit of relevant waste on to a railway track.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
200399	Wastes from railway sanitary conveniences only

- (3) For the purposes of this paragraph, the specific condition is that the total quantity of waste deposited per discharge does not exceed 25 litres.
- (4) In this paragraph, “railway sanitary convenience” means a sanitary convenience or sink forming part of a vehicle used for the carriage of passengers on a railway.

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### Deposit of waste from a portable sanitary convenience (D3)

- 3.—(1) The deposit of relevant waste by burying it.  
 (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
200399	Waste from portable sanitary conveniences only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste deposited over any 12-month period does not exceed 1 cubic metre, and
  - (b) no waste is deposited within—
    - (i) 10 metres of any watercourse,
    - (ii) 50 metres of any spring, well or borehole.

### Deposit of agricultural waste consisting of plant tissue under a Plant Health notice (D4)

- 4.—(1) The deposit of agricultural waste that is relevant waste.  
 (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103	Plant tissue waste

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the deposit is required under a Plant Health notice,
  - (b) where waste is deposited into a pile, the pile—
    - (i) does not exceed 250 tonnes, and
    - (ii) is not immediately adjacent to another pile of the same type of waste,
  - (c) at the time the deposit is made—
    - (i) the land has not been frozen for 12 or more hours in the preceding 24 hours;
    - (ii) the land is not waterlogged, frozen or snow-covered, and
  - (d) no waste is deposited within—
    - (i) 10 metres of any watercourse;
    - (ii) 50 metres of any spring, well or borehole.

### Depositing samples of waste for the purposes of testing or analysing them (D5)

5.—(1) The deposit and subsequent storage of relevant samples of waste at any place where the samples are being or are to be tested or analysed.

(2) For the purposes of sub-paragraph (1), “relevant samples of waste” means samples of waste that are taken—

- (a) in the exercise of any power under—
  - (i) the Control of Pollution Act 1974 <sup>M64</sup>;
  - (ii) section 5 of the Control of Pollution (Amendment) Act 1989 <sup>M65</sup>;
  - (iii) the 1990 Act;

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- (iv) the 1991 Act;
  - (v) the Water Industry Act 1991 <sup>M66</sup>;
  - (vi) the Waste Electrical and Electronic Equipment Regulations 2013 <sup>M67</sup>;
  - (vii) the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 <sup>M68</sup>;
  - (viii) regulation 88 of the Waste Batteries and Accumulators Regulations 2009 <sup>M69</sup>;
  - (b) by or on behalf of the holder of an environmental permit,
  - (c) by or on behalf of a person carrying on in relation to the waste—
    - (i) an operation described in this Part, or
    - (ii) an excluded waste operation,
  - (d) by or on behalf of the owner or occupier of the land from which the samples are taken,
  - (e) by or on behalf of any person to whom section 34(1) or (1A) of the 1990 Act <sup>M70</sup> applies in connection with that person's duties under that section,
  - (f) by or on behalf of any person to whom the Transfrontier Shipment of Waste Regulations 2007 <sup>M71</sup> apply in connection with that person's powers under those Regulations, or
  - (g) for the purposes of research.
- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste deposited or stored at any one time does not exceed 10 tonnes, and
  - (b) the waste is not stored for longer than 12 months or such other period as may be ordered in court proceedings.

#### Marginal Citations

**M64** 1974 c. 40.

**M65** 1989 c. 14; section 5 was substituted, together with section 5A, by section 37 of the [Clean Neighbourhoods and Environment Act 2005 \(c. 16\)](#).

**M66** 1991 c. 56.

**M67** S.I. 2013/3113, amended by S.I. 2014/1771, 2015/1968 and 2016/738.

**M68** S.I. 2007/871, amended by S.I. 2007/3538, 2008/1941, 2010/675, 1159, 1820 (W. 177), 2849, 2011/988, 1043, 2012/3082, 2013/755 (W. 90), 1821, 1857, 2014/2890, 2016/241, 696, and 738.

**M69** S.I. 2009/890, to which there are amendments not relevant to these Regulations.

**M70** Section 34(1) was amended by S.I. 2000/1973, 2007/3528, 2010/675 and 2011/988. Section 34(1A) was inserted by S.I. 2009/1799 and amended by S.I. 2010/675.

**M71** S.I. 2007/1711, amended by S.I. 2007/3538, 2008/9, 2010/265, 675, 1159, 2011/988, 1043 and 2014/861.

#### Disposal by incineration (D6)

6.—(1) The disposal by incineration of the waste described in sub-paragraph (2) in a small waste incineration plant where the requirements in sub-paragraph (4) are met.

(2) The waste described in this paragraph is the waste mentioned in Article 42(2)(a)(i) and (iii) of the Industrial Emissions Directive.

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste stored prior to incineration does not exceed 5 tonnes at any one time, and
- (b) the operation is carried on by the person who produced the waste.

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- (4) The requirements in this sub-paragraph are—
- (a) the small waste incineration plant has a capacity of less than 50kg per hour and a net rated thermal input of less than 0.4 megawatts, and
  - (b) where it is used together with other small waste incineration plants (whether or not it is operated simultaneously with such other small waste incineration plants), the aggregate net rated thermal input of all the small waste incineration plants is less than 0.4 megawatts.

**Burning waste in the open (D7)**

- 7.—(1) The burning of relevant waste on open land.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103, 020107, 200201	Plant tissue
030105	Sawdust, shavings and cuttings from untreated wood only
030301	Waste bark and wood

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste burned over any period of 24 hours does not exceed 10 tonnes,
  - (b) the total quantity of waste stored at any one time does not exceed 20 tonnes, and
  - (c) no waste is stored for longer than 6 months.

**Burning waste at a port under a Plant Health notice (D8)**

- 8.—(1) The burning of relevant waste at a port.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
020103, 020107, 020304, 200201	Plant tissue only
150103, 200138	Wood used to wedge or support parts of cargo, including packing material, spacers and pallets only

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste burned or stored over any period of 24 hours does not exceed 10 tonnes,
  - (b) the burning and storage of waste takes place in a secure place at the port where the waste was unloaded, and
  - (c) the burning is required under a Plant Health notice.

(4) In this paragraph, “port” means a port appointed by order made under section 19 of the Customs and Excise Management Act 1979 <sup>M72</sup>.

**Marginal Citations**  
M72 1979 c. 2.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## CHAPTER 5

### Storage of waste other than at the place of production pending its recovery or re-use

#### SECTION 1

##### Introductory

1.—(1) The descriptions in this Chapter are set out in the first sub-paragraph of paragraphs S1 to S3.

(2) The specific conditions for each of the descriptions in this Chapter are set out in the third sub-paragraph of paragraphs S1 to S3.

(3) The general conditions for all descriptions in this Chapter are that the storage is carried on—

- (a) at a place other than the place of production, and
- (b) pending the recovery of the waste.

#### SECTION 2

##### Storage of waste

#### Storage of waste in secure containers (S1)

1.—(1) The storage of relevant waste at a place in a secure container or containers for the purposes of its recovery elsewhere.

(2) The table specifying relevant waste for the purposes of this paragraph and the storage limits referred to in sub-paragraph (3) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Storage limit (at any one time)</i>
130109* to 130113*	Waste oils	3 cubic metres
130204* to 130208*		
130401* to 130403*		
130701*		
150101, 200101	Cartons	400 cubic metres
150102, 200139	Plastics and plastic packaging	400 cubic metres
150104, 200140	Cans and foil only	400 cubic metres
150101, 200101	Paper and cardboard	400 cubic metres
150107, 200102	Glass	400 cubic metres
150109, 200110, 200111	Textiles and clothes	400 cubic metres
150202*	Absorbents, filter materials (including oil filters not otherwise specified) wiping cloths, protective clothing contaminated by hazardous substances	3 cubic metres
150203	Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 150202	3 cubic metres

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160107\* Oil filters 3 cubic metres

- (3) For the purposes of this paragraph, the specific conditions are that—
- (a) the total quantity of waste stored at any one time does not exceed the limit specified in the third column in the table in sub-paragraph (2),
  - (b) the total quantity of storage containers at the storage place at any one time does not exceed 20,
  - (c) no waste is stored for longer than 12 months,
  - (d) the person storing the waste is the owner of the container or containers or has the consent of the owner,
  - (e) in respect of any waste oils and waste to which code 160107\* (oil filters) applies, the waste is stored with secondary containment, and
  - (f) each waste type is stored separately.

**Storage of waste in a secure place (S2)**

2.—(1) The storage of relevant waste in a secure place for the purposes of its recovery elsewhere.

(2) The table specifying relevant waste for the purposes of this paragraph and the quantity limits referred to in sub-paragraph (3) is set out below.

<i>Codes</i>	<i>Waste types</i>	<i>Storage limit (at any one time)</i>	<i>Period</i>	<i>Additional specific conditions</i>
161002	Aqueous paint related waste only	1,000 litres	6 months	A, C
160601*, 160603*, 160605, 200134, 160602*, 160604, 200133*	Batteries	10 tonnes	6 months	A, B
150104, 200140	Cans and foil only	500 tonnes	12 months	
140601*	CFCs, HCFCs and HFCs	18 tonnes	6 months	A, C
170101, 170103, 170202, 170401 to 170504, 170802	170102, 170107, 170203, 170407, 170604, Construction and demolition waste capable of being used in its existing state (non-hazardous) only	100 tonnes	12 months	
200125	Edible oil and fat only	5,000 tonnes	12 months	A, C
100207*	Electric arc furnace dust only	2,500 tonnes	3 months	D, E, F
020104	Farm plastics (non-packaging) only	500 tonnes	12 months	D
070213, 150102, 200139	150101, 150105, Food and drink cartons only	500 tonnes	12 months	

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101112, 160120, 191205, 200102	150107, 170202,	Glass	5,000 tonnes	12 months	B
020102		Mammalian protein only	60,000 tonnes	12 months	D
020202		Mammalian tallow only	45,000 tonnes	12 months	D
200307		Mattresses only	5 tonnes	3 months	D
010408, 191209		Marble chips only	5,000 tonnes	12 months	
020304		Olive pulp/pellet only	5,000 tonnes	3 months	B, C, E
200127*, 080111*, 080112	200128,	Paints (excluding specialist and industrial paints, wood preservatives, aerosol and spray paints, inks, adhesives and resins) pending re-use as paints only	10,000 litres	6 months	A, C
150101, 200101, 030307	191201, 030308,	Paper and cardboard (excluding food and drink cartons) only	15,000 tonnes	12 months	J, K
090107, 090108		Photographic films and papers	50 tonnes	12 months	J
070213, 150102, 191204, 200139	120105, 160119,	Plastic	500 tonnes	12 months	
100101		Poultry litter ash only	3,000 tonnes	12 months	D, E
080318, 160216, 200139	150102,	Printer cartridges only	5,000 units	6 months	D
170301*, 170504	170302,	Road planings, waste road chippings, road sub-base only	500 tonnes	12 months	
020110, 160118, 170401, 170403, 170405, 170407, 170411	160117, 191203, 170402, 170404, 170406, 191202,	Scrap metal	15,000 tonnes	6 months	B, E
090110, 090112	090111*,	Single use cameras	400 cubic metres	6 months	

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020401, 020399	Soils from cleaning fruit and vegetables only	100 tonnes	6 months	
100316, 100504, 100604, 100899	100405*, Solder metal, 100511, skimmings, ashes and residues	100 tonnes	3 months	G
140602*, 200113*	140603*, Solvents and solvent mixtures	5 cubic metres	6 months	A, C
100101, 100105, 100115	100102, Synthetic gypsum and pulverised fuel ash only	2,500 tonnes	3 months	D, E, F
040222, 191208, 200111	150109, Textiles and clothes	1,000 tonnes	12 months	
160103, 191204	Tyres, tyre chip and crumb	40 tonnes	3 months	H
110113*, 160708*	120301*, Waste cleaning solution containing 2% sodium metasilicate and 1-2% waste oil only	3 tonnes	3 months	A, C
160211*, 160214, 200121*, 200135*	160213*, WEEE	400 cubic metres	6 months	I
030301, 150103, 200138	150102, Wine bottle corks only	500 tonnes	12 months	
030105, 170204*, 191207, 200138	170201, Wood including telegraph poles and railway sleepers (hazardous and non-hazardous)	100 tonnes	12 months	030105, 170201, 170204*, 191206*, 191207, 200137*, 200138

(3) For the purposes of this paragraph, the specific conditions are that—

- (a) the total quantity of waste stored at any one time does not exceed the limit specified in the third column of the table in sub-paragraph (2),
- (b) no waste is stored for longer than the period specified in the fourth column of the table,
- (c) each type of waste is stored separately, and
- (d) the operation complies with such of the following additional conditions as are specified in the fifth column of the table—

- 
- |   |   |
|---|---|
| A | the waste is stored in a container;             |
| B | the storage place has sealed drainage;          |
| C | the waste is stored with secondary containment; |



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- D the waste is stored indoors;
- E the waste is stored at a dock prior to being exported or after being imported;
- F the waste must arrive at the storage place in bags and must be stored there in bags or in drums;
- G the waste is stored in bags or in drums;
- H the total quantity of waste stored together does not exceed 10 tonnes;
- I the waste is stored in accordance with the requirements in paragraph 1 of Annex VIII to the WEEE Directive;
- J the waste is stored in a baled form, in a container or indoors;
- K within the quantity limit specified in the third column of the table and notwithstanding additional specific condition J, up to 1,000 tonnes may be stored outdoors so long as it is stored in an enclosure designed and maintained to prevent the escape of litter.

### Storage of sludge (S3)

- 3.—(1) The storage of relevant waste.
- (2) The table specifying relevant waste for the purposes of this paragraph is set out below.

<i>Codes</i>	<i>Waste types</i>
190805	Residual sludge from sewage plants treating domestic or urban waste waters and from other sewage plants treating waste waters of a composition similar to domestic and urban waste waters only
200304	Residual sludge from septic tanks and other similar installations for the treatment of sewage only

- (3) For the purposes of this paragraph, the specific conditions are that—
  - (a) the total quantity of waste stored at any one time does not exceed 1,250 tonnes,
  - (b) no waste is stored for longer than 12 months,
  - (c) the waste is stored in a secure location at the place where it is to be used,
  - (d) the waste is stored at least—
    - (i) 10 metres from any watercourse;
    - (ii) 50 metres from any spring or well, or from any borehole not used to supply water for domestic or food production purposes;
    - (iii) 250 metres from any borehole used to supply water for domestic or food production purposes,
  - (e) no waste is stored—
    - (i) within a zone defined by a 50-day travel time for groundwater to reach a groundwater abstraction that is used to supply water for domestic or food production purposes;
    - (ii) within 0.3 metres of the top of an open storage container or within 0.75 metres of the top of an earthbank tank or lagoon, and
  - (f) after storage, the waste is to be used in accordance with the Sludge (Use in Agriculture) Regulations 1989 <sup>M73</sup>.

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### Marginal Citations

**M73** S.I. 1989/1263, amended by S.I. 1990/880, 1996/593, 973, 2000/656, 2010/1159, 1820 (W. 177) and 2013/755 (W. 90).

## PART 2

### Exempt water discharge activities: descriptions and conditions

#### Vegetation management activities

1.—(1) For the purpose of paragraphs 5(a)(i) and 6(a)(i) of Schedule 2, the description is cutting or uprooting a substantial amount of vegetation in any inland freshwaters or so near to any such waters that it falls into them, where it is not reasonable to take steps to remove the vegetation from those waters.

(2) For the purpose of paragraphs 5(a)(ii) and 6(a)(ii) of that Schedule, the conditions in relation to a water discharge activity described in sub-paragraph (1) are that—

- (a) prior notice of the dates of the water discharge activity is given to persons likely to be affected by such an activity, including—
  - (i) the owner of any structure within or on the watercourse,
  - (ii) the owner of any designated site within or on the watercourse,
  - (iii) fisheries interests,
  - (iv) boating interests,
  - (v) the appropriate agency,
  - (vi) the local authority,
  - (vii) the internal drainage board (which has the same meaning as in the Land Drainage Act 1991 <sup>M74</sup>), and
- (b) the activity is not carried on if there is insufficient flow to convey the vegetation.
- (3) In sub-paragraph (2)(a)(ii), "designated site" means—
  - (a) a European site (which has the meaning given in regulation 8 of [<sup>F98</sup>the Conservation of Habitats and Species Regulations 2017]),
  - (b) a Ramsar site (which has the same meaning as in section 37A of the Wildlife and Countryside Act 1981 <sup>M75</sup>),
  - (c) a site of special scientific interest (which has the meaning given in section 52(1) of the Wildlife and Countryside Act 1981 <sup>M76</sup>), or
  - (d) a nature reserve established by a local authority under section 21 of the National Parks and Access to the Countryside Act 1949 <sup>M77</sup>.

### Textual Amendments

**F98** Words in Sch. 3 Pt. 2 para. 1(3)(a) substituted (30.11.2017) by The Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012), reg. 1(2), Sch. 6 para. 73(2)(a)

### Marginal Citations

**M74** 1991 c. 59.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- M75** 1981 c. 69; section 37A was inserted by section 77 of the [Countryside and Rights of Way Act 2000 \(c. 37\)](#) and was amended by paragraph 86 of Part 1 of Schedule 11 to the [Natural Environment and Rural Communities Act 2006 \(c. 16\)](#), by paragraphs 5 and 7 of Schedule 2 to the [Planning \(Wales\) Act 2015 \(anaw. 4\)](#) and by [S.I. 2013/755 \(W. 90\)](#).
- M76** The definition was inserted by paragraph 5(2) of Schedule 9 to the [Countryside and Rights of Way Act 2000](#).
- M77** 1949 c. 97; section 21 was amended by Schedule 30 to the [Local Government Act 1972 \(c. 70\)](#), by paragraphs 15(e) and 19 of Part 1 of Schedule 11 to the [Natural Environment and Rural Communities Act 2006](#), and by paragraph 1 of Part 1 of Schedule 2 to the [Environment \(Wales\) Act 2016 \(anaw. 3\)](#).

### Small discharges of sewage effluent: Wales

2.—(1) For the purpose of paragraph 5(a)(i) of Schedule 2, the description is the discharge from a sewage treatment plant of 5 cubic metres per day or less of sewage effluent into inland freshwaters, coastal waters or relevant territorial waters.

(2) For the purpose of paragraph 5(a)(ii) of that Schedule, the conditions in relation to a water discharge activity described in sub-paragraph (1) are—

- (a) in the case of a discharge which takes place for the first time on or after the date on which these Regulations come into force, that all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in the document entitled “Guidance for the registration of small sewage effluent discharges”, issued by the NRBW and dated July 2011 and updated in September 2016<sup>M78</sup>, in relation to—
- (i) design and manufacturing standards,
  - (ii) construction, installation and operation specifications,
  - (iii) siting and installation, and
  - (iv) the capacity of the works and equipment;
- (b) that the discharge cannot reasonably, at the time it is first made, be made to the foul sewer;
- (c) that the discharge does not contain trade effluent;
- (d) that all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer's specification;
- (e) that records of maintenance work are kept by the person who is the occupier of the land on which the discharge is made (“the occupier”) for at least 5 years after the work is carried out;
- (f) that the occupier must notify the exemption registration authority if an exempt water discharge activity ceases to be in operation;
- (g) that the occupier must ensure that all works and equipment used for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of pollutants entering inland freshwaters or coastal waters;
- (h) that, before an occupier ceases to be in occupation of land on which an exempt water discharge activity is carried on, the occupier must give to the person who will next be in occupation of the land a written notice—
- (i) stating that an exempt water discharge activity is being carried on on the land,
  - (ii) containing a description of the exempt facility,
  - (iii) stating the conditions that must be satisfied in relation to the exempt facility, and
  - (iv) accompanied by any records of maintenance mentioned in paragraph (e).

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### Marginal Citations

**M78** See <https://naturalresources.wales/media/679226/guidance-for-the-registration-of-small-sewage-effluent-discharges.pdf> and <https://naturalresources.wales/media/679225/canllawiau-ar-gyfer-cofrestru-gollyngiadau-elifion-carthion-bach.pdf>. A copy may be obtained from Natural Resources Wales, c/o Customer Care Centre, Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP.

### Small discharges of sewage effluent: England

**3.—(1)** For the purpose of paragraph 6(a)(i) of Schedule 2, the description is the discharge from a sewage treatment plant of 5 cubic metres per day or less of sewage effluent into inland freshwaters, coastal waters or relevant territorial waters.

(2) For the purpose of paragraph 6(a)(ii) of that Schedule, the conditions in relation to a water discharge activity described in sub-paragraph (1) are that an operator of the sewage treatment plant ensures that—

- (a) all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in the [F99 document entitled “General binding rules for small sewage discharges (SSDs) with effect from 2nd October 2023” published by the Agency on 23rd March 2023]<sup>M79</sup> in relation to—
  - (i) design and manufacturing standards,
  - (ii) construction, installation and operation specifications,
  - (iii) siting and installation, and
  - (iv) the capacity of the works and equipment;
- (b) in the case of a discharge which takes place for the first time on or after 1st January 2015, the discharge could not reasonably be made to the foul sewer;
- (c) the discharge does not contain trade effluent;
- (d) all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer's specification;
- (e) all works and equipment used for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of polluting matter entering inland freshwaters or coastal waters;
- (f) before the land or part of the land on which the sewage treatment plant is situated or being used is sold, an owner of the land or part of the land gives to the purchaser a written notice—
  - (i) stating that an exempt water discharge activity is being carried on on the land, and
  - (ii) containing a description of the exempt facility.

(3) For the purposes of this paragraph, an operator is a person who has control over the operation of the sewage treatment plant by reason of—

- (a) being an owner of the land on which the sewage treatment plant is situated or being used, or
- (b) having entered into a written agreement with the owner of the land on which the sewage treatment plant is situated or being used to be responsible for the maintenance of the sewage treatment plant.

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**Textual Amendments**

**F99** Words in Sch. 3 Pt. 2 para. 3(2)(a) substituted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), 5(a)

**Marginal Citations**

**M79** See [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/397173/ssd-general-binding-rules.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/397173/ssd-general-binding-rules.pdf). A copy may be obtained from the Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY.

## PART 3

### Exempt groundwater activities: descriptions and conditions

#### Interpretation of Part 3

1. In this Part—

[<sup>F100</sup>“ancient woodland” means any area that has been wooded continuously since at least 1600 AD, including ancient semi-natural woodland and plantations on ancient woodland sites;]

“groundwater tracer test” means a study of—

- (a) the behaviour or movement of water, or
- (b) a contaminant below ground,

which involves the addition to groundwater of a distinguishable material which has nearly identical properties to the contaminant or water being studied;

<sup>F101</sup> .....

[<sup>F100</sup>“protected site” means—

- (a) a wetland designated as a European site (which has the meaning given in regulation 8 of the Conservation of Habitats and Species Regulations 2017),
- (b) a Ramsar site (which has the same meaning as in section 37A of the Wildlife and Countryside Act 1981),
- (c) a nature reserve established by a local authority under section 21 of the National Parks and Access to the Countryside Act 1949, or
- (d) a site of special scientific interest (which has the meaning given in section 52(1) of the Wildlife and Countryside Act 1981);]

“specified groundwater remediation scheme” means a remediation scheme which involves the addition of a substance or preparation to groundwater which enhances the rate of remediation of groundwater contaminants;

“water features” includes boreholes, wells, adits, springs, seepage and wetland areas, ponds, lakes and watercourses;

“water features survey” means a survey of all water features within 1 kilometre of the proposed activity that may be affected by it.

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### Textual Amendments

- F100** Words in Sch. 3 Pt. 3 para. 1 inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **5(b)(i)**
- F101** Words in Sch. 3 Pt. 3 para. 1 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(9)(b)(i)**; 2020 c. 1, Sch. 5 para. 1(1)

### Discharge of small quantities of substances for scientific purposes

2.—(1) For the purpose of paragraphs 7(a)(i) and 8(a)(i) of Schedule 2, the description is the discharge of small quantities of substances for scientific purposes as part of—

- (a) a specified groundwater remediation scheme, or
- (b) a groundwater tracer test,

[<sup>F102</sup>limited to the amount strictly necessary for that purpose]

(2) For the purpose of paragraphs 7(a)(ii) and 8(a)(ii) of that Schedule, the conditions in relation to a groundwater activity of that description are—

- (a) that a water features survey has demonstrated that the discharge will not cause pollution;
- (b) that the prior consent of every person having a right to abstract water in the vicinity of the discharge has been obtained;
- (c) that the exemption registration authority is notified before the commencement of the discharge;
- (d) that in the case of discharges as part of a specified groundwater remediation scheme, monitoring of the discharge, to determine whether pollution has been caused, is undertaken.

### Textual Amendments

- F102** Words in Sch. 3 Pt. 3 para. 2(1) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(9)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

### Small discharges of sewage effluent: Wales

3.—(1) For the purpose of paragraph 7(a)(i) of Schedule 2, the description is a discharge from a septic tank or sewage treatment plant of 2 cubic metres per day or less of sewage effluent that results in the input of pollutants to groundwater.

(2) For the purpose of paragraph 7(a)(ii) of that Schedule, the conditions in relation to a groundwater activity of that description are—

- (a) in the case of a discharge which takes place for the first time on or after the date on which these Regulations come into force, that all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in the document entitled “Guidance for the registration of small sewage effluent discharges”, issued by the NRBW and dated July 2011 and updated in September 2016, in relation to—
  - (i) design and manufacturing standards,
  - (ii) construction, installation and operation specifications,
  - (iii) siting and installation of infiltration systems, and

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- (iv) the capacity of the works and equipment;
- (b) that the discharge cannot reasonably, at the time it is first made, be made to the foul sewer;
- (c) that the discharge does not contain trade effluent;
- (d) that the discharge does not result in an input of pollutants to groundwater—
  - (i) within 50 metres of a point at which water is abstracted from underground strata, or
  - (ii) within a zone defined by a 50-day travel time for groundwater to reach a groundwater abstraction point that is used to supply water for domestic or food production purposes;
- (e) that all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer's specification;
- (f) that records of maintenance work are kept by the person who is the occupier of the land on which the discharge is made (“the occupier”) for at least 5 years after the work is carried out;
- (g) that the occupier must notify the exemption registration authority if an exempt groundwater activity ceases to be in operation;
- (h) that the occupier must ensure that all works and equipment for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of pollutants entering groundwater;
- (i) that before an occupier ceases to be in occupation of land on which an exempt groundwater activity is carried on, the occupier must give to the person who will next be in occupation of the land a written notice—
  - (i) stating that an exempt groundwater activity is being carried on on the land,
  - (ii) containing a description of the exempt facility,
  - (iii) stating the conditions that must be satisfied in relation to the exempt facility, and
  - (iv) accompanied by any records of maintenance mentioned in paragraph (f).

#### **Small discharges of sewage effluent: England**

4.—(1) For the purpose of paragraph 8(a)(i) of Schedule 2, the description is a discharge from a septic tank or sewage treatment plant of 2 cubic metres per day or less of sewage effluent that results in the input of pollutants to groundwater.

(2) For the purpose of paragraph 8(a)(ii) of that Schedule, the conditions in relation to a groundwater activity of that description are that an operator of the septic tank or sewage treatment plant ensures that—

- (a) all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in the [<sup>F103</sup>document entitled “General binding rules for small sewage discharges (SSDs) with effect from 2nd October 2023” published by the Agency on 23rd March 2023] in relation to—
  - (i) design and manufacturing standards,
  - (ii) construction, installation and operation specifications,
  - (iii) siting and installation of infiltration systems, and
  - (iv) the capacity of the works and equipment;
- (b) in the case of a discharge which takes place for the first time on or after 1st January 2015, the discharge could not reasonably be made to the foul sewer;
- (c) the discharge does not contain trade effluent;

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- [<sup>F104</sup>(d) the discharge does not result in an input of pollutants to groundwater within a groundwater Source Protection Zone 1;]
- (e) all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer's specification;
  - (f) all works and equipment for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of pollutants entering groundwater;
  - (g) before the land or part of the land on which the septic tank or sewage treatment plant is situated or being used is sold, an owner of the land or part of the land gives to the purchaser a written notice—
    - (i) stating that an exempt groundwater activity is being carried on on the land, and
    - (ii) containing a description of the exempt facility.
- (3) For the purposes of this paragraph, an operator is a person who has control over the operation of the septic tank or sewage treatment plant by reason of—
- (a) being an owner of the land on which the septic tank or sewage treatment plant is situated or being used, or
  - (b) having entered into a written agreement with the owner of the land on which the septic tank or sewage treatment plant is situated or being used to be responsible for the maintenance of the septic tank or sewage treatment plant.

#### Textual Amendments

**F103** Words in Sch. 3 Pt. 3 para. 4(2)(a) substituted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **5(b)(ii)(aa)**

**F104** Sch. 3 Pt. 3 para. 4(2)(d) substituted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **5(b)(ii)(bb)**

#### Open-loop ground source heating and cooling systems

5.—(1) For the purpose of paragraphs 7(a)(i) and 8(a)(i) of Schedule 2, the description is the discharge of water to groundwater from a heating or cooling system to which sub-paragraph (3) applies with altered temperature.

(2) For the purpose of paragraphs 7(a)(ii) and 8(a)(ii) of that Schedule, the conditions in relation to a groundwater activity of that description are—

- (a) that nothing must be added to water discharged from the system;
- (b) that the temperature of water discharged from the system—
  - (i) subject to sub-paragraph (ii), must not exceed 25° C, and
  - (ii) must not vary by more than 10° C compared to that in the aquifer from which it was abstracted;
- (c) that the system must not be on a known contaminated site or have had a previous contaminative use;
- (d) that water from the system must not be discharged less than 50 metres from a watercourse or groundwater-fed wetland;
- (e) [<sup>F105</sup>in relation to Wales,] that water from the system must not be discharged—
  - (i) less than 50 metres from a point at which water is abstracted from underground strata, or



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- (ii) within a zone defined by a 50-day travel time for groundwater to reach a groundwater abstraction point that is used to supply water for domestic or food production purposes;
- [<sup>F106</sup>(ea) in relation to England, that water from the system must not be discharged within a groundwater Source Protection Zone 1;]
- (f) that the discharge of water from the system must be to the same aquifer as that from which it was abstracted;
- (g) that water within the system must not be used for any other purpose.
- (3) This sub-paragraph applies to a system—
  - (a) that involves—
    - (i) the abstraction of groundwater to obtain heating or (as the case may be) cooling, and
    - (ii) the subsequent discharge of that water, and
  - (b) that is—
    - (i) a cooled aquifer system with a volume of less than 1500 cubic metres per day,
    - (ii) a balanced system with a volume of less than 430 cubic metres per day, or
    - (iii) a heated aquifer system with a volume of less than 215 cubic metres per day.

(4) In this paragraph—

“balanced system” means a system used for both heating and cooling and where in a 5-year period the ratio of the discharge water temperature to the abstracted water temperature is within the range 0.8 to 1.2;

“cooled aquifer system” means a system used for both heating and cooling and where in a 5-year period the ratio of the discharge water temperature to the abstracted water temperature is less than 0.8;

“groundwater-fed wetland” means a terrestrial ecosystem directly depending on a body of groundwater (within the meaning of the Water Framework Directive) and includes—

- (a) a European site (which has the meaning given in regulation 8 of [<sup>F107</sup>the Conservation of Habitats and Species Regulations 2017]);
- (b) a site of special scientific interest (which has the meaning given in section 52(1) of the Wildlife and Countryside Act 1981 <sup>M80</sup>);

“heated aquifer system” means a system used for both heating and cooling and where in a 5-year period the ratio of the discharge water temperature to the abstracted water temperature exceeds 1.2.

#### Textual Amendments

**F105** Words in Sch. 3 Pt. 3 para. 5(2)(e) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **5(b)(iii)(aa)**

**F106** Sch. 3 Pt. 3 para. 5(ea) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **5(b)(iii)(bb)**

**F107** Words in Sch. 3 Pt. 3 para. 5(4) substituted (30.11.2017) by The Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012), reg. 1(2), **Sch. 6 para. 73(2)(b)**

#### Marginal Citations

**M80** 1981 c. 69; the definition was inserted by paragraph 5(2) of Schedule 9 to the Countryside and Rights of Way Act 2000 (c. 37).

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## [<sup>F108</sup>Closed-loop ground source heating and cooling systems: England

6.—(1) For the purpose of paragraph 8(a)(i) of Schedule 2, the description is a closed-loop ground source heating or cooling system—

- (a) which is fully sealed and does not take water from, or discharge water or fluids into, the environment, and
- (b) where any borehole is used, the borehole is fully sealed and does not take water from the environment.

(2) For the purpose of paragraph 8(a)(ii) of Schedule 2, the conditions in relation to a groundwater activity of that description are that an operator of the system ensures that—

- (a) the system is a closed-loop system only and that there is no discharge of pollutants other than the transfer of heat to the environment,
- (b) the system does not cause pollution of surface water or groundwater,
- (c) no part of the system is within a groundwater Source Protection Zone 1,
- (d) no part of the system is within 50m of a well, spring or borehole used to supply water for domestic or food production purposes,
- (e) no part of the system is within the following distance of a protected site or an ancient woodland—
  - (i) 20m, where the system supplies only residential premises and the maximum output of the system is 45kW or less,
  - (ii) 50m, where the system supplies—
    - (aa) only a single community building,
    - (bb) only residential premises and the maximum output of the system is more than 45kW,
    - (cc) only a single building that is not a community building or residential premises and which has a floor space of less than 1000m<sup>2</sup>, or
    - (dd) subject to sub-paragraph (i), more than one building where the total floor space within those buildings combined is less than 1000m<sup>2</sup>, or
  - (iii) 250m in any other case,
- (f) the installation of the system does not mobilise any contaminants present in the subsurface to the extent that the pollution of groundwater occurs,
- (g) no part of the system is adjacent to a septic tank or cesspit, including the infiltration system,
- (h) all equipment installed in relation to the system complies with the relevant design and manufacturing standards set down in—
  - (i) the relevant British Standards, and
  - (ii) the relevant Ground Source Heat Pump Association standards, and
- (i) the system is appropriately decommissioned when it ceases to be in operation so that there is no risk of pollutants or polluting matter entering groundwater.

(3) In this regulation—

“community building” includes a building used as a place of worship;

“relevant British Standards” means—

- (a) BS EN 378-1:2016+A1:2020 entitled “Refrigerating systems and heat pumps — Safety and environmental requirements, Part 1: Basic requirements, definitions, classification

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and selection criteria” published by the British Standards Institution on 30th November 2020,

- (b) BS EN 378-2:2016 entitled “Refrigerating systems and heat pumps — Safety and environmental requirements, Part 2: Design, construction, testing, marking and documentation” published by the British Standards Institution on 31st December 2016,
- (c) BS EN 378-3:2016+A1:2020 entitled “Refrigerating systems and heat pumps — Safety and environmental requirements, Part 3: Installation site and personal protection” published by the British Standards Institution on 30th November 2020,
- (d) BS EN 378-4:2016+A1:2019 entitled “Refrigerating systems and heat pumps — Safety and environmental requirements, Part 4: Operation, maintenance, repair and recovery” published by the British Standards Institution on 31st October 2019,
- (e) BS EN 805:2000 entitled “Water supply — Requirements for systems and components outside buildings” published by the British Standards Institution and coming into effect on 15th September 2000, and
- (f) BS 5930:2015+A1:2020 entitled “Code of practice for ground investigations” published by the British Standards Institution on 31st May 2020;

“relevant Ground Source Heat Pump Association standards” means—

- (a) the Closed-loop Vertical Borehole Design, Installation and Materials Standards, issue 1.0, dated 2020 and published by the Ground Source Heat Pump Association,
- (b) the Shallow Ground Source Standard, Version 2, dated January 2018 and published by the Ground Source Heat Pump Association, and
- (c) the Thermal Pile Design, Installation and Materials Standards, Version 2, dated September 2018 and published by the Ground Source Heat Pump Association.

#### Textual Amendments

**F108** Sch. 3 Pt. 3 paras. 6, (7) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **5(b)(iv)**

### Low-environmental-risk burials at new cemeteries or new extensions of cemeteries: England

7.—(1) For the purpose of paragraph 8(a)(i) of Schedule 2, the description is any burial of human remains, other than a burial of human ashes from crematoria, within a new cemetery or new extension of a cemetery.

(2) In sub-paragraph (1), “new cemetery or new extension of a cemetery” means a development which, by virtue of section 57 of the Town and Country Planning Act 1990, required planning permission authorising a change of use of land to permit burials which was granted on or after 2nd October 2023.

(3) For the purpose of paragraph 8(a)(ii) of Schedule 2, the conditions in relation to a burial of that description are that the operator ensures that—

- (a) any activity relating to the burial must not cause pollution of surface water or groundwater,
- (b) the burial is not within 10m of any field drain, including any dry ditch,
- (c) the grave has at least 1m clearance between the base of the grave and the top of the water table,
- (d) the burial is not undertaken directly into groundwater,
- (e) the grave is not dug in unaltered or unweathered bedrock,

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- (f) the grave is not dug in an area susceptible to groundwater flooding,
- (g) the burial is not within 30m of any spring or watercourse,
- (h) the burial is not in, or within 50m of, a protected site,
- (i) the burial is not in an ancient woodland,
- (j) the new cemetery or extension in question does not have more than 2500 burials per hectare, in proportion to the total area of the new cemetery or extension,
- (k) no part of the new cemetery or extension in question is within a groundwater Source Protection Zone 1,
- (l) no part of the new cemetery or extension in question is within 250m of any well, spring or borehole that is used to supply water for domestic drinking or food production purposes,
- (m) the new cemetery or extension is located either—
  - (i) entirely on strata which are unproductive strata,
  - (ii) entirely on strata which are a secondary B aquifer or entirely on strata which are secondary undifferentiated rocks, where the number of burials is less than 100 burials per annum,
  - (iii) entirely on a secondary A aquifer, where the number of burials is less than 50 burials per annum,
  - (iv) entirely on a principal aquifer and not in a groundwater Source Protection Zone 2, where the number of burials is less than 30 burials per annum, or
  - (v) on any combination of strata mentioned in paragraphs (i) to (iv), subject to sub-paragraph (4), and
- (n) the new cemetery or extension does not need ongoing active control measures to be in place to protect the environment.

(4) Where a new cemetery or extension is, pursuant to sub-paragraph (3)(m)(v), partly located on one of the strata mentioned in sub-paragraph (3)(m)(ii), (iii) or (iv), the restriction on the numbers of burials per annum in sub-paragraph (3)(m)(ii), (iii) or (iv) (as the case may be) applies to the area of the new cemetery or extension located on that strata.

(5) In sub-paragraph (3)—

“groundwater flooding” means flooding where the water table beneath the ground rises and causes water to seep out at ground level;

“groundwater Source Protection Zone 2” means a zone—

- (a) within—
  - (i) 250m of a point at which water is abstracted for domestic or food production purposes from underground strata where the maximum allowable annual volume as authorised by a licence under section 24 of the Water Resources Act 1991 or allowed by virtue of section 27 of that Act (as the case may be) divided by 365 is less than 2,000 m<sup>3</sup> per day, or
  - (ii) 500m of a point at which water is abstracted for domestic or food production purposes from underground strata where the maximum allowable annual volume as authorised by a licence under section 24 of the Water Resources Act 1991 divided by 365 is equal to or greater than 2,000 m<sup>3</sup> per day, or
- (b) defined by a 400-day travel time for groundwater to reach a groundwater abstraction point that is used to supply water for domestic or food production purposes, whichever is larger;

“principal aquifer” means geological strata which—

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- (a) exhibit a high intergranular or fracture permeability, and
- (b) provide a high level of water storage and support water supply or base flow to rivers, lakes and wetlands on a strategic scale;

“secondary A aquifer” means permeable strata capable of supporting water supplies at a local rather than strategic scale;

“secondary B aquifer” means predominantly lower permeability strata including where they have, in part, the ability to store and yield limited amounts of groundwater by virtue of localised features such as fissures, thin permeable horizons or weathering;

“secondary undifferentiated rocks” means rock deposits or strata with variable permeability and storage properties which are not consistently a secondary A aquifer or secondary B aquifer;

“unproductive strata” means geological strata which—

- (a) have a low permeability that has negligible significance for water supply or river base flow, and
- (b) consist of deposits that naturally offer protection to any aquifers that may be present beneath.]

#### Textual Amendments

**F108** Sch. 3 Pt. 3 paras. 6, (7) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **5(b)(iv)**

## PART 4

### Exempt flood risk activities: descriptions and conditions

#### General and interpretation

1.—(1) The descriptions in this Part are set out in paragraphs 2 to 28, in their respective first sub-paragraphs.

(2) The specific conditions relating to each description in this Part are set out in paragraphs 2 to 28, in their respective second sub-paragraphs.

(3) The general conditions relating to all descriptions in this Part are that the activity is not carried out—

- (a) on a designated site or—
  - (i) in the case of the description set out in paragraphs 2 to 4, 6, 8, 9, 12, 13, 15, 16, 18 to 20 and 25 to 28, in their respective first sub-paragraphs, within a 200 metre radius of a designated site;
  - (ii) in the case of the description set out in paragraphs 5, 7, 10, 11, 14 and 17, in their respective first sub-paragraphs, within a 500 metre radius of a designated site;
  - (iii) in the case of the description set out in paragraphs 21, 22 and 24, in their respective first sub-paragraphs, within one kilometre upstream of a designated site;
  - (iv) in the case of the description set out in paragraph 23, in its first sub-paragraph, within—
    - (aa) 5 kilometres upstream of a designated site notified for its freshwater habitats or species,

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- (bb) 1 kilometre upstream of a designated site that includes any part of the flood plain of the relevant main river but not the river itself, or
  - (cc) 1 kilometre upstream of any other designated site,
  - (b) in a water body in Wales that is part of a main river classified as of high morphological status by the NRBW in accordance with the relevant directions,
  - (c) where the activity is carried out in Wales, within 100 metres of a water body in Wales that is part of a main river classified as of high morphological status by the NRBW in accordance with the relevant directions, or
  - (d) in the case of the descriptions set out in paragraphs 3, 5, 7, 10 to 15, 18, 21 to 24 and 27, in their respective first sub-paragraphs, where the activity is carried out in England within 100 metres of a water body in Wales that is part of a main river classified as of high morphological status by the NRBW in accordance with the relevant directions.
- (4) In sub-paragraph (3), “designated site” means—
- (a) a European site (which has the meaning given in regulation 8 of [<sup>F109</sup>the Conservation of Habitats and Species Regulations 2017]),
  - (b) a Ramsar site (which has the same meaning as in section 37A of the Wildlife and Countryside Act 1981 <sup>M81</sup>),
  - (c) a site of special scientific interest (which has the meaning given in section 52(1) of the Wildlife and Countryside Act 1981), or
  - (d) a nature reserve established by a local authority under section 21 of the National Parks and Access to the Countryside Act 1949 <sup>M82</sup>.
- (5) For the purposes of this Part—
- “designated salmonid river” means—
- (a) in England, a river included in the dataset sealed by the Agency on 22nd October 2015, entitled “Rivers in England identified as salmonid for flood risk activities under the Environmental Permitting Regulations”, and published by the Agency <sup>M83</sup>;
  - (b) in Wales, a river included on the map published by the NRBW on 20th October 2015 entitled “Rivers in Wales identified as salmonid for flood risk activities under the Environmental Permitting Regulations”<sup>M84</sup>;
- “designated sensitive water body” means a water body included in the dataset sealed by the Agency on 20th October 2015 entitled “Water bodies in England identified as sensitive for flood risk activities under the Environmental Permitting Regulations because sediment management may compromise delivery of the environmental objectives of the Water Framework Directive” and published by the Agency <sup>M85</sup>;
- “the dredging and removal of silt and sand requirements” means the document published by the Agency on 1st February 2016 entitled “Dredging and the removal of silt and sand from main rivers as a flood risk activity under the Environmental Permitting Regulations”<sup>M86</sup>;
- “protected species” means—
- (a) [<sup>F110</sup>a species of a kind listed in Annex 1 to Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds or Annex 4 to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora;]
  - (b) a species in respect of which any adverse impact is in accordance with a licence issued under section 16 of the Wildlife and Countryside Act 1981 <sup>M87</sup>;
- “relevant directions” means the Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015 <sup>M88</sup>.

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(6) In this Part, “bank” has the meaning given in paragraph 2(2)(a) in Part 1 of Schedule 25 and paragraph 2(2)(b) to (d) of that Schedule applies to this Part.

[<sup>F111</sup>(7) In sub-paragraph (5), in sub-paragraph (a) of the definition of “protected species”, a reference to a species listed in an Annex to Directive 2009/147/EC or Council Directive 92/43/EEC is to be construed as including a reference to any other species protected under the Conservation of Habitats and Species Regulations 2017.]

#### Textual Amendments

- F109** Words in Sch. 3 Pt. 4 para. 1(4)(a) substituted (30.11.2017) by [The Conservation of Habitats and Species Regulations 2017 \(S.I. 2017/1012\)](#), reg. 1(2), **Sch. 6 para. 73(2)(c)**
- F110** Words in Sch. 3 Pt. 4 para. 1(5) substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(9)(c)(i)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)
- F111** Sch. 3 Pt. 4 para. 1(7) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(9)(c)(i)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Marginal Citations

- M81** Section 37A was inserted by section 77 of the Countryside and Rights of Way Act 2000 and was amended by paragraph 86 of Part 1 of Schedule 11 to the [Natural Environment and Rural Communities Act 2006 \(c. 16\)](#), by paragraphs 5 and 7 of Schedule 2 to the Planning (Wales) Act 2015 (anaw. 4) and by [S.I. 2013/755 \(W. 90\)](#).
- M82** [1949 c. 97](#); section 21 was amended by Schedule 30 to the [Local Government Act 1972 \(c. 70\)](#), by paragraphs 15(e) and 19 of Part 1 of Schedule 11 to the Natural Environment and Rural Communities Act 2006, and by paragraph 1 of Part 1 of Schedule 2 to the Environment (Wales) Act 2016 (anaw. 3).
- M83** A copy may be obtained from the Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY.
- M84** The map is available at <https://naturalresources.wales/media/5634/flood-epr-salmonids.pdf>. A copy may be obtained from Natural Resources Wales, c/o Customer Care Centre, Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP.
- M85** A copy may be obtained from the Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY.
- M86** A copy may be obtained from the Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY.
- M87** Section 16 was amended by paragraph 11(4) of Schedule 9 to the 1990 Act, paragraph 6 of Schedule 12 to the Countryside and Rights of Way Act 2000, paragraph 72 of Part 1 of Schedule 11 to the Natural Environment and Rural Communities Act 2006, section 10 of the [Marine and Coastal Access Act 2009 \(c. 23\)](#) and by [S.I. 1995/2825](#), 2007/1843 and 2013/755 (W. 90).
- M88** These Directions were made on 9th September 2015 in exercise of powers in section 40(2) of the 1995 Act and are available at [http://www.legislation.gov.uk/ukxi/2015/1623/pdfs/ukxi0d\\_20151623\\_en.pdf](http://www.legislation.gov.uk/ukxi/2015/1623/pdfs/ukxi0d_20151623_en.pdf). A copy may be obtained from the Flood Risk Management Team, the Department for Environment, Food and Rural Affairs, Area 3C, Nobel House, 17 Smith Square, London SW1P 3JR.

#### Electrical cable services

- 2.—(1) The erection of an electrical cable service crossing over a main river.
- (2) For the purposes of this paragraph, the specific conditions are—
- the service crossing is within 10° of perpendicular to the direction of flow of the main river,
  - the vertical and horizontal clearances of the service crossing comply with the requirements set out in the table below,

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- (c) permanent hazard markers are erected on both banks of the main river,
- (d) the bed and banks of the main river are not disturbed by the works, and
- (e) all excavated material not re-used on the site of the works is removed from the floodplain.

<i>Voltage (kV)</i>	<i>Vertical clearance<sup>1</sup>(metres)</i>	<i>Horizontal clearance<sup>2</sup>(metres)</i>
275	15	15
400	15	15
132	12	15
66	12	15
33	9	10
11	9	10
6.6	9	10
4.15	6	9

<sup>1</sup> Vertical clearance above bank or flood bank crest level.

<sup>2</sup> Horizontal clearance of any tower or support landward from the top of the bank of the main river.

### Service crossings below the bed of a main river

3.—(1) The erection of a service crossing below the bed of a main river by directional drilling not involving an open cut technique.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the service crossing is within 10° of perpendicular to the direction of flow in the main river,
- (b) a distance is maintained—
  - (i) of no less than 1.5 metres from the bed of the main river to the top of the service crossing, and
  - (ii) at the same height above sea level between points that are 5 metres beyond the top of each bank of the main river,
- (c) the distance from the launch and reception pits to the landward side of each bank of the main river is—
  - (i) 8 or more metres in the case of a non-tidal main river;
  - (ii) 16 or more metres in the case of a tidal main river;
- (d) the service crossing does not pass through any bank, culvert, remote defence or river control works on the main river or through any sea defence,
- (e) the service crossing is 50 or more metres upstream of any impoundment or artificially raised channel,
- (f) permanent hazard markers are erected on both banks of the main river,
- (g) all excavated material not re-used on the site of the works is removed from the floodplain,
- (h) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (i) the bed and banks of the main river are not disturbed by the works.



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## Service crossings attached to the outside of existing structures over a main river

- 4.—(1) Service crossings attached to the outside of existing structures over a main river.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the service crossing does not project more than 1 metre horizontally from the structure,
  - (b) the service crossing follows the existing cross-sectional profile of the structure to the main river in both normal and flood flow,
  - (c) the service crossing does not pass through any bank, culvert, flood defence structure or river control works on the main river or through any sea defence,
  - (d) permanent hazard markers are erected on both banks of the main river, and
  - (e) a notification has not been sent by the regulator to the landowner that the structure has been identified for removal or modification in order to achieve the [F112 environmental objectives in relation to a river basin district].

### Textual Amendments

**F112** Words in Sch. 3 Pt. 4 para. 4(2)(e) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(9)(d); 2020 c. 1, Sch. 5 para. 1(1)

## Footbridges

- 5.—(1) The construction of footbridges.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the length of the footbridge measured from the top of one bank of the main river to the top of the other bank is no more than 8 metres,
  - (b) the footbridge has no support in the watercourse, a deck width of no more than 1.5 metres and a kickerboard of no more than 100mm in height,
  - (c) the footbridge does not reduce the cross-sectional area of the channel in the main river,
  - (d) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 <sup>M89</sup>, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016 <sup>M90</sup>, that are not protected species,
  - (e) no works take place within 100 metres of any non-agricultural building in the floodplain or another man-made structure on or in the main river,
  - (f) the bed of the main river is not affected by the construction,
  - (g) the length of bank disturbed by the construction extends to no more than 1 metre on either side of the footbridge,
  - (h) the footbridge is securely attached to foundations which are no closer than 1 metre to the edge of the bank,
  - (i) construction of the footbridge does not require reinforcement of the bed or banks,
  - (j) the approach ramp or steps for the footbridge do not extend more than 4 metres from the landward side of the bank,
  - (k) the lowest point of the underside of the bridge is at least 600mm higher than the top of both banks of the main river,
  - (l) all excavated material not re-used on the site of the works is removed from the floodplain,

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- (m) the height of the land at each end of the footbridge is not changed by the construction,
- (n) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (o) any parapet of the footbridge is of open construction comprising—
  - (i) post and rail,
  - (ii) post and wire mesh fencing of at least 100mm spacing, or
  - (iii) post and wire strands.

#### Marginal Citations

**M89** 2006 c. 16.

**M90** 2016 anaw. 3.

#### Temporary scaffolding in England

- 6.—(1) The erection and use of temporary scaffolding in or over a main river in England.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the scaffolding will be in place for no longer than 4 weeks,
  - (b) the scaffolding is not in place between 15th March and 15th June inclusive in any year,
  - (c) on a main river that is a designated salmonid river, the scaffolding is not in place between 1st October and 14th March inclusive in any year,
  - (d) the scaffolding does not occupy more than 10 metres of a river bank at any one time,
  - (e) the scaffolding projects into or over the main river no more than 1.2 metres or no more than 10% of the width of the main river, whichever is less,
  - (f) the scaffolding is located no less than 100 metres from any other scaffolding the erection and use of which is reliant on this exemption,
  - (g) except where it is unsafe to do so, debris lodged against the scaffolding is removed within 24 hours, and
  - (h) any transoms and walking decks are set no lower than 600 mm above water level.

#### Temporary dewatering in England

- 7.—(1) The temporary dewatering of a work area in England.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the duration of the dewatering is no longer than 4 weeks,
  - (b) the dewatering is not in place between 15th March and 15th June inclusive in any year,
  - (c) on a main river that is a designated salmonid river, the dewatering is not in place between 1st October and 14th March inclusive in any year,
  - (d) the dewatering does not affect more than 10 metres of the bank of a main river at any one time,
  - (e) the dewatering is not within 8 metres of a flood defence structure or river control works,
  - (f) the depth of water adjacent to the dewatered area does not exceed 1.2 metres,
  - (g) the dewatering does not occur in, or within 500 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural

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Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,

- (h) all reasonable steps are taken to protect aquatic plants and aquatic animals found in the dewatered area,
- (i) the dewatering structure projects into or over the main river no more than 1.2 metres or no more than 10% of the width of the main river, whichever is less,
- (j) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
- (k) all excavated material not re-used on the site of the works is removed from the floodplain,
- (l) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (m) any pumps used in the dewatering process are fitted with a 20mm mesh screen.

#### **Maintenance of raised river or sea defences**

- 8.—**(1) The maintenance of raised river or sea defences.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the maintenance works use materials of the same kind as those present in the raised defences and do not alter the shape of those defences or the overall height of the protection afforded by those defences,
  - (b) the raised defences are carrying out the functions for which they were originally designed, and
  - (c) the works do not disturb the bed or, up to normal ground level, the banks of the main river.

#### **Maintenance of structures within the channel of a main river**

**9.—**(1) The maintenance of structures within the channel of a main river other than raised river or sea defences.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the maintenance works do not alter any dimension of the structure,
  - (b) the structure is carrying out the functions for which it was originally designed,
  - (c) the maintenance works use materials of the same kind as those present in the structure,
  - (d) the maintenance works do not occur between 15th March and 15th June inclusive in any year,
  - (e) on a main river that is a designated salmonid river, the maintenance works do not occur between 1st October and 14th March inclusive in any year, and
  - (f) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species.

#### **Drinking bays**

- 10.—**(1) The construction of a drinking bay on the bank of a main river.

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- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the bay is not located within 100 metres of any other man-made structure on or in the main river,
  - (b) the bay is surrounded by a post and rail fence which must project into or over the main river no more than 1.2 metres or 10% of the width of the main river, whichever is less,
  - (c) the base of the bay has a surface made of concrete, stone or inert hard core,
  - (d) all excavated material not re-used on the site of the works is removed from the floodplain,
  - (e) the works do not adversely affect any culvert, remote defence, river control works, sea defence or any raised embankment or wall forming part of the bank of the main river,
  - (f) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
  - (g) the works do not occur in, or within 500 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
  - (h) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (i) the remainder of the bank is fenced so as to prevent damage to the bank.

### Access platforms

**11.—**(1) The construction of access platforms on the bank of a main river or that project into or over a main river.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the platform is not located within 50 metres of any other man-made structure,
  - (b) the platform projects no more than 1.2m into or over the main river and occupies no more than 2m of bank length,
  - (c) the works do not adversely affect any culvert, remote defence, river control works, sea defence or any raised embankment or wall forming part of the bank of the main river,
  - (d) that part of the platform which projects over the channel is constructed as a flat deck, with no solid infill beneath the platform, supported on piers or piles of no more than 300mm width,
  - (e) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
  - (f) the works do not occur in, or within 500 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
  - (g) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (h) any steps cut into the bank are supported by timber risers on the vertical part of the step.

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## Outfalls

- 12.**—(1) The construction of small outfall pipes and headwalls to main rivers.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the headwall is not located within 50 metres of another man-made structure on or in the main river,
  - (b) in the case of a headwall to a non-tidal main river, the outfall pipe is aligned to an angle of between 30° and 60° to the direction of flow in the river,
  - (c) the diameter of the outfall pipe is less than 300mm,
  - (d) the height of the headwall is no more than 1.5 metres or no more than 75% of the height of the bank, whichever is less,
  - (e) the total length of bank affected during construction of the headwall is no more than 1.5 metres,
  - (f) the headwall, wing walls and apron do not project beyond the line of the bank prior to the works being carried out,
  - (g) the headwall is not within 8 metres of a flood defence structure or river control works,
  - (h) the outfall pipe does not pass through or under any culvert, remote defence, river control works or sea defence, or any raised embankment or wall forming part of the bank of the main river,
  - (i) all excavated material not re-used on the site of the works is removed from the floodplain,
  - (j) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
  - (k) the works do not occur in, or within 200 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
  - (l) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (m) any pipe that discharges through the headwall does not pass within 8 metres of a flood defence structure.

## Repair and protection of banks using natural materials

- 13.**—(1) The repair and protection of main river banks using natural materials.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the length of bank affected by the works is no more than 10 metres,
  - (b) the works do not include the use of steel sheet piling, concrete, cement or concrete bagwork, brickwork, gabions or non-biodegradable materials,
  - (c) the works do not take place within 50 metres of a bank that has been reinforced,
  - (d) the works do not encroach into the channel of the main river beyond the line of the bank prior to the works being carried out,
  - (e) when the works are finished, the height of the bank does not exceed the lower of—
    - (i) the height of the bank on either side of the works, and

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- (ii) the height of the bank prior to the works being carried out,
- (f) the works are securely fastened to the bank at each end so as to prevent erosion behind the works,
- (g) the works do not involve the use of vehicles or wheeled or tracked machinery on the bed or bank of the main river,
- (h) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 <sup>M91</sup>, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016 <sup>M92</sup>, that are not protected species,
- (i) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (j) the works are not to a bank consisting of an earth cliff over 1 metre in height.

#### Marginal Citations

**M91** 2006 c. 16.

**M92** 2016 anaw. 3.

### Repair of bank slips and erosion

14.—(1) Repair of bank slips and erosion.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the works do not involve removal of material from the bed of the main river other than bank slippage,
- (b) the works do not affect more than 10 metres of the bank at any one time,
- (c) the works do not encroach into the channel of the main river beyond the line of the bank prior to the works being carried out,
- (d) when the works are finished, the height of the bank does not exceed the lower of—
  - (i) the height of the bank on either side of the works, and
  - (ii) the height of the bank prior to the slip or erosion,
- (e) the works are securely fastened to the bank at each end so as to prevent erosion behind the works,
- (f) any repair of a bank slippage is made using as materials only material that has subsided from that bank,
- (g) any repair of erosion uses materials of the same kind as those present on the relevant site,
- (h) the works do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
- (i) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (j) the works do not involve the use of a vehicle or of wheeled or tracked machinery on the bed or banks of the main river.

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### Channel habitat structures made of natural materials

**15.**—(1) The installation of channel habitat structures made of natural materials (excluding weirs and berms).

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the structure occupies no more than half the width of the cross-sectional area of the channel in the main river and no more than 20 metres of the length of the main river,
  - (b) no part of the structure is higher than 0.3 metres above the level of the river bed or 25% of the height of the bank (excluding any wall or embankment forming part of the bank), whichever is greater,
  - (c) the structure is made from naturally occurring woody material and is securely fastened to the bed of the main river, the bank or both,
  - (d) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (e) no works take place within 100 metres of—
    - (i) a non-agricultural building in the floodplain,
    - (ii) another natural channel habitat structure,
    - (iii) stones or logs placed in the main river for habitat enhancement, or
    - (iv) a man-made structure on or in the main river.

### Rafts for surveys

**16.**—(1) The installation of rafts for surveys.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the raft has dimensions of no greater than 1.5 metres x 1 metre x 0.15 metre,
  - (b) any equipment box used on the raft has a height of no more than 0.75 metre,
  - (c) the raft is permanently and securely attached to the bank,
  - (d) the raft is installed no less than 100 metres from any other raft,
  - (e) when the raft is installed, there are no more than four other rafts within a distance of one kilometre,
  - (f) the raft is installed for no more than 12 months and removed immediately if, within that period, it is no longer required, and
  - (g) the raft is not installed within 100 metres of any non-agricultural building in the floodplain or another man-made structure on or in the main river.

### Gravel-cleaning for fish-spawning beds

**17.**—(1) Gravel-cleaning for fish-spawning beds.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the works are only carried out in September or October in any year,
  - (b) the works are to no more than 20m<sup>2</sup> of gravel per location, with a gap of at least 30 metres between locations,
  - (c) the works do not adversely affect the banks or established bed of the main river,
  - (d) the works are carried out using only hand tools or machinery carried and operated by one person, and

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- (e) the works do not occur in, or within 500 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016.

### **Placement of stones or logs in a main river in England for habitat enhancement**

**18.**—(1) Placement of stones or logs in the channel of a main river in England for habitat enhancement.

- (2) For the purposes of this paragraph, the specific conditions are—
  - (a) any stones placed in the channel are of a type that occur naturally in the main river and do not exceed 400mm in any dimension,
  - (b) any log placed in the channel is less than 2 metres in length, less than 400mm in diameter and oriented at an angle of within 45° to the flow of water,
  - (c) any log placed in the channel—
    - (i) is from a type of tree that occurs naturally in the vicinity of the main river, and
    - (ii) is securely fixed to the bed or bank of the main river,
  - (d) the stones or logs are placed in the channel over no more than 20 metres of the length, and 20% of the width, of the main river,
  - (e) the placement of stones or logs does not occur in, or within 200 metres upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
  - (f) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (g) no stones or logs are placed within 100 metres of—
    - (i) a non-agricultural building in the floodplain,
    - (ii) a natural channel habitat structure,
    - (iii) an existing emplacement of stones or logs placed in the main river for habitat enhancement, or
    - (iv) a man-made structure on or in the main river.

### **Eel pass devices**

- 19.**—(1) Construction of eel pass devices on existing structures.
- (2) For the purposes of this paragraph, the specific conditions are—
  - (a) the existing structure is not located on a tidal river,
  - (b) the device is permanently and securely attached to the existing structure,
  - (c) the width of the device is no more than 5% of the width of the main river, and
  - (d) the device does not extend upstream or downstream from the existing structure more than the lesser of—
    - (i) 10 metres, or
    - (ii) the width of the channel measured between the top of each bank of the main river.



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### [<sup>F113</sup>Notches]

- 20.**—(1) Construction of <sup>F114</sup>...notches on an existing impoundment.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the construction does not affect the structural integrity of the existing impoundment,
  - (b) construction of the notches does not change the water level in the main river by more than 20cm upstream or downstream from the existing structure,
  - (c) the existing impoundment is located on a main river with a width of no more than 5 metres measured between the top of each bank,
  - (d) the construction does not adversely affect the banks or established bed of the main river, and
  - (e) the notch is no more than 0.6 metre in width.

#### Textual Amendments

**F113** Sch. 3 Pt. 4 para. 20 heading substituted (7.1.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(1), **4(3)(a)**

**F114** Words in Sch. 3 Pt. 4 para. 20(1) omitted (7.1.2019) by virtue of [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(1), **4(3)(b)**

### Removal of silt, sand and other material in England

**21.**—(1) The removal of silt and sand from within bridge arches in England and any material from within culverts in England.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the works do not affect the structural integrity of the bridge arch or culvert,
  - (b) in the case of works within bridge arches, the removal of silt and sand is limited to the removal of accumulated silt and sand on the established bed of the main river,
  - (c) the works do not occur in, or within 1 kilometre upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
  - (d) the works and the subsequent deposition of the removed material do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
  - (e) the works do not occur between 15th March and 15th June inclusive in any year,
  - (f) on a main river that is a designated salmonid river, the works do not occur between 1st October and 14th March inclusive in any year,
  - (g) the works do not expose the structural foundations or footings of the bridge or culvert,
  - (h) the works and any equipment used to remove the sand and silt comply with the dredging and removal of silt and sand requirements,
  - (i) the works do not involve the use of machinery on the bed or banks of the main river more than 20 metres from the bridge or culvert,
  - (j) the works do not involve the use of a vehicle on the bed or banks of the main river,

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- (k) the works do not damage the culvert or the banks or bed of the main river, and
- (l) the works are not carried out in, or within 1 kilometre upstream or 500 metres downstream of, a water body that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions.

### Removal of silt and sand adjacent to in-river structures in England

- 22.**—(1) The removal of silt and sand adjacent to in-river structures in England.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the works take place no more than 10 metres upstream or downstream from the edge of the structure,
  - (b) the removal of silt and sand does not affect the structural integrity of the structure,
  - (c) the works do not damage the banks or bed of the main river,
  - (d) the works are limited to the removal of accumulated silt and sand on the established bed of the main river,
  - (e) the removal of silt and sand does not expose the structural foundations or footings of the structure,
  - (f) silt and sand is not removed to below the level of the base of the inside of an adjacent culvert,
  - (g) the works do not remove vegetation from the bed or banks of the main river, other than vegetation growing in or through the silt and sand,
  - (h) the works do not involve the use of a vehicle or machinery on the bed or banks of the main river,
  - (i) the removal of silt and sand does not occur in, or within 1 kilometre upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 <sup>M93</sup> or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016 <sup>M94</sup>,
  - (j) the removal of silt and sand and its subsequent deposition do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
  - (k) the removal of silt and sand does not occur between 15th March and 15th June inclusive in any year,
  - (l) on a main river that is a designated salmonid river, the removal of silt and sand does not occur between 1st October and 14th March inclusive in any year,
  - (m) the works and any equipment used to remove the sand and silt comply with the dredging and removal of silt and sand requirements,
  - (n) the works are not carried out in, or within one kilometre upstream or 500 metres downstream of, a water body that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
  - (o) the removal of silt and sand does not occur in a designated sensitive water body.

#### Marginal Citations

**M93** 2006 c. 16.

**M94** 2016 anaw. 3.

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### **Dredging of man-made ditches, land drains, agricultural drains and previously straightened watercourses in England**

**23.**—(1) Dredging of no more than 1.5 kilometres of man-made ditches, land drains, agricultural drains and previously straightened watercourses classified as main rivers in England.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the works do not occur in any location where dredging has been carried out within the previous 3 years,
- (b) the works do not occur in any location on a watercourse where dredging has taken place within 1.5 kilometres upstream or downstream of that location in the previous 12 months,
- (c) the works are completed within 3 years of registration of the exemption,
- (d) the works do not damage the bed or banks of the main river,
- (e) the dredging does not include the removal of gravel,
- (f) the dredging is limited to the removal of accumulated silt and sand on the established bed of the main river,
- (g) the works do not remove vegetation from the bed or banks of the main river, other than vegetation growing in or through the silt and sand,
- (h) the works do not involve the use of a vehicle or machinery on the bed or banks of the main river,
- (i) the works do not occur in, or within one kilometre upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
- (j) the dredging and subsequent deposition of dredged material do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
- (k) the works do not occur between 15th March and 15th June inclusive in any year,
- (l) on a main river that is a designated salmonid river, the works do not occur between 1st October and 14th March inclusive in any year,
- (m) the works and any equipment used comply with the dredging and removal of silt and sand requirements,
- (n) the works are not carried out in, or within 1 kilometre upstream or 500 metres downstream of, a water body that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions,
- (o) the works do not occur in a designated sensitive water body,
- (p) on a non-tidal main river, the works do not occur within 8 metres of a flood defence structure or river control works, and
- (q) on a tidal main river, the works do not occur within 16 metres of a flood defence structure or sea defence.

### **Dredging of any main river in England**

**24.**—(1) Dredging of no more than 20 metres of any main river in England.

(2) For the purposes of this paragraph, the specific conditions are—

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- (a) no dredging has been carried out in the previous 12 months in the same main river and property,
- (b) the works are completed within 12 months of registration of the exemption,
- (c) the works do not damage the bed or banks of the main river,
- (d) the dredging does not include the removal of gravel,
- (e) the works do not remove vegetation from the bed or banks of the main river, other than vegetation growing in or through the silt and sand,
- (f) the dredging is limited to the removal of accumulated silt and sand on the established bed of the main river,
- (g) the works do not involve the use of a vehicle or machinery on the bed or banks of the main river,
- (h) the works do not occur in, or within 1 kilometre upstream of, a type of habitat included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006 or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016,
- (i) the dredging and subsequent deposition of dredged material do not have a significant adverse effect on species included in a list published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006, or by Welsh Ministers under section 7 of the Environment (Wales) Act 2016, that are not protected species,
- (j) the works do not occur between 15th March and 15th June inclusive in any year,
- (k) on a main river that is a designated salmonid river, the works do not occur between 1st October and 14th March inclusive in any year,
- (l) the works and any equipment used comply with the dredging and removal of silt and sand requirements,
- (m) the works are not carried out in, or within 1 kilometre upstream or 500 metres downstream of, a water body that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (n) the dredging does not occur in a designated sensitive water body.

#### **Excavation of scrapes and shallow wetland features**

- 25.**—(1) The excavation of scrapes and shallow wetland features in a floodplain.
- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the area of the excavation is no more than 0.1 hectare and takes place at least 100 metres from any other excavation in the floodplain,
  - (b) the excavation is no more than 500mm deep at any point,
  - (c) where spoil from the excavation is spread on the floodplain, the spoil is spread to a depth of no more than 100mm, and
  - (d) the excavation is at least 8 metres from any structure forming part of a flood defence and from the landward side of each bank of the main river.

#### **Raised flood defences in England**

- 26.**—(1) The construction of raised flood defences around one to six adjoining properties in England.
- (2) For the purposes of this paragraph, the specific conditions are—

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- (a) the works are not within 8 metres of a main river,
- (b) the dimensions of the flood defences are no more than 1 metre in height and 6 metres in width,
- (c) the defences are located at least 20 metres from any building not owned by the owners of the properties,
- (d) the total area protected by the defences is no more than 150m<sup>2</sup> for each property,
- (e) the defences are to protect existing buildings, and
- (f) the works are within the existing boundary of the properties.

### **Bankside wildlife refuge structures**

**27.**—(1) Construction of bankside wildlife refuge structures.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the length of bank excavated during construction of the structure is no more than 1.5 metres,
- (b) the height of the structure is no more than 1.5 metres or no more than 75% of the height of the bank, whichever is less,
- (c) the structure is not located within 50 metres of another man-made structure on or in the main river,
- (d) the structure is not located within 8 metres of a flood defence structure or river control works,
- (e) the works are not carried out in, or within 100 metres of, a water body in England that is part of a main river classified as of high morphological status by the Agency in accordance with the relevant directions, and
- (f) the structure does not project beyond the line of the bank prior to the works being carried out.

### **Improvement works for tracks and paths**

**28.**—(1) Improvement works for tracks and paths.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the works are to an existing track or path,
- (b) the works do not alter the route or width of the track or path,
- (c) the works do not disturb the bed or banks of any main river,
- (d) the works do not increase the level of the path by more than 100mm, and
- (e) when the works are completed, all materials and debris are removed from the site.

## **PART 5**

Other waste operations to which section 33(1)(a) of the 1990 Act does not apply: descriptions and conditions

### **General and interpretation**

**1.**—(1) The descriptions in this Part are set out in the first sub-paragraph of each paragraph.

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(2) The conditions for each description are set out in the second sub-paragraph of each paragraph.

(3) In this Part—

“collection” has the same meaning as in Article 3(10) of the Waste Framework Directive;

“collection point” means a place which is used for the collection of waste by an establishment or undertaking where the establishment or undertaking does not—

- (a) receive payment for collecting the waste, or
- (b) collect waste as its main business activity;

“place of production” has the meaning given in paragraph 1(1) of Part 1 of this Schedule.

(4) For the purposes of this Part, a container, lagoon or other place is secure in relation to waste kept in it if—

- (a) all reasonable precautions are taken to ensure that the waste cannot escape from it, and
- (b) members of the public are unable to gain access to the waste.

#### **Temporary storage at the place of production**

2.—(1) The temporary storage of any waste at the place of production, pending its collection.

(2) For the purposes of this paragraph, the conditions are—

- (a) no waste is stored for longer than 12 months, and
- (b) the waste is stored in a secure place.

#### **Temporary storage of waste at a place controlled by the producer**

3.—(1) The temporary storage of any waste, pending its collection, at a place controlled by the producer of the waste.

(2) For the purposes of this paragraph, the conditions are—

- (a) the producer has control over the waste and the storage place,
- (b) the waste does not contain or consist of—
  - (i) unbonded asbestos, or
  - (ii) any substance with a flash point of less than 21 degrees Celsius,
- (c) the operation is not carried on in the course of providing a waste management service to another person,
- (d) the waste is stored in a secure place,
- (e) where more than one type of waste is stored, the types are not mixed,
- (f) no waste is stored for longer than 3 months,
- (g) in relation to non-liquid waste, the total quantity stored at any one time does not exceed 50 cubic metres, and
- (h) in relation to liquid waste—
  - (i) the total quantity stored at any one time does not exceed 1,000 litres, and
  - (ii) the waste is stored in a container with secondary containment.

#### **Temporary storage at a collection point**

4.—(1) The temporary storage of waste at a collection point for the purposes of recovering or disposing of the waste elsewhere.

(2) For the purposes of this paragraph, the conditions are that—

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- (a) the waste does not contain or consist of—
  - (i) asbestos;
  - (ii) any substance with a flash point of less than 21 degrees Celsius,
- (b) where more than one type of waste is stored, the types are not mixed,
- (c) in relation to WEEE, the total quantity of waste stored at any one time does not exceed 30 cubic metres,
- (d) in relation to non-hazardous waste that—
  - (i) is not WEEE, and
  - (ii) is to be recovered elsewhere,the total quantity of waste stored any one time does not exceed 50 cubic metres, and
- (e) in relation to waste not covered by paragraph (d) or (e), the total quantity of waste stored at any one time does not exceed 5 cubic metres.

#### SCHEDULE 4

Regulation 11

#### Application to the Crown

##### **Crown application**

1. Subject to paragraphs 2 to 5, these Regulations bind the Crown.

##### **Contravention of these Regulations by the Crown**

- 2.—(1) If the Crown contravenes a provision of these Regulations—
  - (a) it is not criminally liable under regulation 38, and
  - (b) no proceedings may be taken against it under regulation 42.
- (2) But—
  - (a) on the application of a regulator, the High Court may declare a contravention of these Regulations by the Crown to be unlawful, and
  - (b) these Regulations apply to persons in the public service of the Crown as they apply to other persons.

##### **Entry to Crown premises**

3.—(1) If the appropriate authority considers that in the interests of national security particular powers of entry must not be used in relation to particular Crown premises it may certify that those powers must not be used in relation to those premises.

- (2) In this paragraph—

“Crown premises” means premises held or used by or on behalf of the Crown;

“power of entry” means a power of entry exercisable under section 108 of the 1995 Act<sup>M95</sup>, in relation to a function under these Regulations.

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#### Marginal Citations

**M95** Section 108 was amended by section 55(6) to (9) of the Anti-social Behaviour Act 2003 (c. 38), section 53 of the Clean Neighbourhoods and Environment Act 2005 (c. 16), and paragraph 3(1) to (4) of Part 1 of Schedule 2 to the Protection of Freedoms Act 2012 (c. 9), and by S.I. 2000/1973, 2010/675, 2013/755 (W. 90), 2015/374 and 2016/475. It is prospectively amended by Schedule 3 to the Pollution Prevention and Control Act 1999 (c. 24) from a date to be appointed.

#### Service on certain Crown operators

4.—(1) This paragraph applies in relation to a regulated facility controlled or operated by a person acting on behalf of—

- (a) the Royal Household,
- (b) the Duchy of Lancaster, or
- (c) the Duke of Cornwall or other possessor of the Duchy of Cornwall.

(2) When serving or giving notices or notifications, or instituting proceedings, the following person must be treated as the operator—

- (a) in relation to sub-paragraph (1)(a), the Keeper of the Privy Purse;
- (b) in relation to sub-paragraph (1)(b), the person appointed by the Chancellor of the Duchy of Lancaster;
- (c) in relation to sub-paragraph (1)(c), the person appointed by the Duke of Cornwall or other possessor of the Duchy of Cornwall.

#### Application of this Schedule to certain radioactive substances activities

5.—(1) These Regulations do not bind the Crown in relation to a radioactive substances activity carried on at premises—

- (a) occupied on behalf of the Crown for naval, military or air force purposes or for the purposes of the department of the Secretary of State having responsibility for defence, or
- (b) occupied by or for the purposes of visiting forces.

(2) In this paragraph, “visiting force” has the meaning given in section 12(1) of the Visiting Forces Act 1952 <sup>M96</sup>.

#### Marginal Citations

**M96** 1952 c. 67; section 12 was amended by paragraph 14 of Schedule 15 to the Criminal Justice Act 1988 (c. 33).



## SCHEDULE 5

Regulations 13(3) and 15(3)

### Environmental permits

## PART 1

### Grant, variation, transfer and surrender of environmental permits

#### Modifications etc. (not altering text)

C37 Sch. 5 Pt. 1 excluded (3.11.2022) by The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order 2022 (S.I. 2022/1067), arts. 1, 6(1)(b)

#### Interpretation

1. In this Part—

“applicant” means—

- (a) in the case of an application for the transfer of an environmental permit in whole or in part—
  - (i) the operator and the proposed transferee, or
  - (ii) the proposed transferee;
- (b) in every other case, the operator;

“application” means an application—

- (a) for the grant of an environmental permit under regulation 13(1),
- (b) by an operator for the variation of an environmental permit under regulation 20(1),
- (c) for the transfer, in whole or in part, of an environmental permit under regulation 21(1), or
- (d) for the surrender, in whole or in part, of an environmental permit under regulation 25(2);

“public consultee” means a person whom the regulator considers is affected by, is likely to be affected by, or has an interest in, an application.

#### Making an application

2.—(1) An application must—

- (a) be made by the applicant on the form provided by the regulator, and
- (b) include—
  - (i) such information as is specified on the form, and
  - (ii) any additional information required by the regulator.

(2) An application under regulation 13(1) for the grant of an environmental permit for a flood risk activity referred to in paragraph 3(1)(a) to (c) of Part 1 of Schedule 25 must be accompanied by—

- (a) a fee of £50 for each flood risk activity to which the application relates, unless the regulator has made a charging scheme under section 41 of the 1995 Act<sup>M97</sup>, or
- (b) where the regulator has made such a charging scheme, the fee prescribed under that scheme.

(3) Any other application must be accompanied by any fee prescribed in a charging scheme made by the regulator under section 41 of the 1995 Act or by the appropriate authority under regulation 66.

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### Marginal Citations

**M97** Section 41 was amended by paragraph 39 of Schedule 4 to the [Flood and Water Management Act 2010](#) (c. 29), and by [S.I. 2005/894](#), 1806 (W. 138), 2006/937, 2007/1711, 3106, 2008/3087, 2009/890, 3381, 2011/988, 1043, 2911, 2012/1659, 2788, 2013/755 (W. 90), 1821 and 2014/861.

### Withdrawing an application

3.—(1) A duly-made application may be withdrawn by the applicant before it is determined.

(2) If an application is withdrawn the applicant is not entitled to the return of any fee which accompanied it.

### Further information in respect of a duly-made application

4.—(1) If the regulator considers that it requires further information to determine a duly-made application, it may serve a notice on the applicant specifying the further information and the period within which it must be provided.

(2) If the applicant fails to provide the further information in accordance with the notice, the regulator may serve a further notice on the applicant stating that the application is deemed to be withdrawn, upon which the application is deemed to be withdrawn.

(3) If an application is deemed to be withdrawn, the applicant is not entitled to the return of any fee which accompanied it.

### Public participation: scope

5.—(1) Paragraph 6 applies to every application for the grant of an environmental permit except an application in relation to—

- (a) mobile plant,
- (b) a radioactive substances activity described in paragraph 11(5) of Part 2 of Schedule 23,
- (c) a standard facility,
- (d) a mining waste operation not involving a mining waste facility to which Article 7 of the Mining Waste Directive applies, or
- (e) a stand-alone flood risk activity—
  - (i) which is not likely to have a significant adverse effect on the environment, or
  - (ii) in respect of which public consultation has been carried out under another statutory requirement where that consultation addresses the potential environmental impact of the flood risk activity.

[<sup>F115</sup>(f) a medium combustion plant or a specified generator, unless the regulator determines that the operation of the medium combustion plant or specified generator may have significant negative effects on human beings or the environment]

(2) Paragraph 6 applies to every application for the variation of an environmental permit if—

- (a) it would entail a substantial change, or
- (b) the regulator determines that the paragraph should apply.

(3) Paragraph 8 applies to every regulator-initiated variation if—

- (a) it would entail a substantial change, or
- (b) the regulator determines that the paragraph should apply.

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(4) But paragraphs 6 and 8 do not apply to the extent that the application or regulator-initiated variation relates to—

- (a) the burning of waste oil in an appliance with a rated thermal input of less than 0.4 megawatts,
- (b) dry cleaning,
- (c) the unloading of petrol into stationary storage tanks at a service station if it is an activity within paragraph (c) of Part B of Section 1.2 of Part 2 of Schedule 1,
- (d) any motor vehicle refuelling activity within paragraph (d), (e) or (f) of Part B of Section 1.2 of Part 2 of Schedule 1, or
- (e) a stand-alone flood risk activity—
  - (i) which is not likely to have a significant adverse effect on the environment, or
  - (ii) in respect of which public consultation has been carried out under another statutory requirement where that consultation addresses the potential environmental impact of the flood risk activity.

(5) In this paragraph—

“change in operation” means a change in the nature or functioning, or an extension, of an installation, which may have consequences for the environment;

“dry cleaning” means an industrial or commercial activity using volatile organic compounds to clean garments, furnishing and similar consumer goods excluding the manual removal of stains and spots in the textile or clothing industry;

“substantial change” means a change in operation of an installation which in the regulator's opinion may have significant negative effects on human beings or the environment and includes—

- (a) in relation to a Part A installation, a change in operation which in itself meets the thresholds, if any, set out in Part 2 of Schedule 1, and
- (b) in relation to a waste incineration plant or waste co-incineration plant for non-hazardous waste, a change in operation which would involve the incineration or co-incineration of hazardous waste.

(6) When assessing whether a change in operation of a Part B installation has significant effects on the environment, the regulator must consider only its emissions to air.

[<sup>F116</sup>(7) When assessing whether the operation of a medium combustion plant or a specified generator may have significant negative effects on human beings or the environment, the regulator must consider only its emissions to air.]

#### Textual Amendments

**F115** Sch. 5 Pt. 1 para. 5(1)(f) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **13(a)**

**F116** Sch. 5 Pt. 1 para. 5(7) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **13(b)**

#### Public participation in relation to certain applications

**6.—(1)** Subject to sub-paragraphs (2) and (3), if this paragraph applies the regulator must, within the consultation communication period—

- (a) take the steps it considers appropriate to inform the public consultees of the application and the place and times its public register can be inspected free of charge,

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- (b) invite the public consultees to make representations on the application, and
  - (c) specify to the public consultees the address to which and the period within which representations are to be made.
- (2) The regulator must not inform the public consultees of information which is to be excluded from a public register in the interests of national security unless the appropriate authority directs that it must do so.
- (3) The regulator must not inform the public consultees of information which is to be excluded from a public register because it is confidential information, unless the public consultee is—
- (a) a public authority and the information is necessary for the exercise of its functions, or
  - (b) a sewerage undertaker and the information relates to the release of any substance into a sewer vested in that undertaker.

### Calculation of the consultation communication period

7.—(1) In paragraph 6, “the consultation communication period” means a period of 30 working days starting on the day the regulator receives a duly-made application.

- (2) But the period starts on—
  - (a) the determination date, if a determination in relation to national security or confidentiality is made under regulation 47 or 50, or
  - (b) the day an information subject gives notice under regulation 49(2)(a) consenting to the regulator including information on the public register.
- (3) In sub-paragraph (2), “determination date” means—
  - (a) the date of a determination under regulation 47(3) or (7),
  - (b) the date of a determination under regulation 50 that information must be excluded from the public register, or
  - (c) if the regulator determines under regulation 50 that information must be included on the public register—
    - (i) if an appeal is brought, the date of determination or withdrawal of that appeal, or
    - (ii) if no appeal is brought, the date on which the period for bringing an appeal expires.

### Public participation in relation to regulator-initiated variations

- 8.—(1) If this paragraph applies, the regulator must notify the operator—
- (a) that the public participation procedures in sub-paragraph (2) apply,
  - (b) of the variation it proposes to the environmental permit, and
  - (c) of any fee prescribed in respect of this paragraph in a charging scheme made by the regulator under section 41 of the 1995 Act or by the appropriate authority under regulation 66.
- (2) The regulator must—
- (a) take the steps it considers appropriate to inform the public consultees of the proposed variation,
  - (b) invite the operator and the public consultees to make representations on the proposed variation, and
  - (c) specify to the operator and the public consultees the address to which and the period within which representations are to be made.

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### Consultation: conditions mentioned in regulation 15(1)

9.—(1) This paragraph applies if the regulator proposes to include a condition mentioned in regulation 15(1) in an environmental permit, other than a condition to which sub-paragraph (2) applies.

(2) This sub-paragraph applies to a condition that does not specifically identify the land in relation to which the operator is required to carry out works or, as the case may be, do other things.

(3) If this paragraph applies, the regulator must serve a notice which complies with sub-paragraph (4) on every person appearing to it to fall within sub-paragraph (5).

(4) The notice must specify—

- (a) the proposed condition,
- (b) the works or other things which the condition would require, and
- (c) the address to which and the period within which representations on the proposed condition are to be made (which period must not expire less than 20 working days after the day the notice is served).

(5) A person falls within this sub-paragraph if—

- (a) the person is the owner, lessee or occupier of land, and
- (b) regulation 15(2) would require the person to grant the rights mentioned there if the proposed condition were included in the environmental permit.

(6) In sub-paragraph (5)(a), “owner” means the person who—

- (a) is receiving the rack-rent of the land, whether on the person's own account or as agent or trustee for another person, or
- (b) would receive the rack-rent if the land were let at a rack-rent,

but does not include a mortgagee not in possession.

### Consultation with <sup>F117</sup>... member States

10.—(1) This paragraph applies if—

- (a) an appropriate authority is aware that the grant of a relevant application or regulator-initiated variation is likely to have significant negative effects on the environment of [<sup>F118</sup>a] member State, or
- (b) [<sup>F119</sup>a] member State requests information about a relevant application or about a proposal for a regulator-initiated variation.

(2) As soon as is reasonably practicable the appropriate authority must—

- (a) send the particulars of the relevant application or regulator-initiated variation to that member State <sup>F120</sup>... ,
- (b) inform that member State of the relevant information, <sup>F121</sup>...
- (c) notify the operator and the regulator that it has complied with paragraphs [<sup>F122</sup>(a) and (b)] [<sup>F123</sup>, and]

[<sup>F124</sup>(d) comply with sub-paragraph (2A).]

[<sup>F125</sup>(2A) The appropriate authority must—

- (a) consult the authorities of that member State, and
- (b) allow such reasonable period as may have been agreed with those authorities for them to ensure that the authorities and the public concerned in that member State are given an opportunity to forward their representations on the relevant information supplied.]

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- (3) If a regulator receives notification under sub-paragraph (2)(c), it must not determine the application or make the regulator-initiated variation until the appropriate authority has—
- (a) notified it that the [F126consultation described in sub-paragraph (2A)(a) has] been completed, and
  - [F127(aa) notified it that the period described in sub-paragraph (2A)(b) has ended, and]
  - (b) sent it any representations made by the member State.
- (4) In this paragraph—
- “member State” includes Iceland, Liechtenstein and Norway but only to the extent that there is a relevant application or regulator-initiated variation which relates to the carrying on at an installation of an activity listed in Annex I to the Industrial Emissions Directive;
- “relevant application” means an application for the grant or variation of an environmental permit in relation to an installation described in sub-paragraph (5) or a Category A mining waste facility;
- F128  
.....
- “relevant information” means—
- (a) where the relevant application or regulator-initiated variation relates to an installation described in sub-paragraph (5), a matter in paragraph 1 of Annex IV to the Industrial Emissions Directive;
  - (b) where it relates to a Category A mining waste facility, the information [F129described in Article 7(2)] of the Mining Waste Directive.
- (5) The description in this sub-paragraph is an installation where an activity listed in Annex 1 to the Industrial Emissions Directive is carried on.

**Textual Amendments**

- F117** Word in Sch. 5 Pt. 1 para. 10 heading omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(i)**; 2020 c. 1, Sch. 5 para. 1(1)
- F118** Word in Sch. 5 Pt. 1 para. 10(1)(a) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F119** Word in Sch. 5 Pt. 1 para. 10(1)(b) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F120** Words in Sch. 5 Pt. 1 para. 10(2)(a) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(iii)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)
- F121** Word in Sch. 5 Pt. 1 para. 10(2)(b) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(iii)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)
- F122** Words in Sch. 5 Pt. 1 para. 10(2)(c) substituted (7.1.2019) by The Environmental Protection (Miscellaneous Amendments) (England and Wales) Regulations 2018 (S.I. 2018/1227), **regs. 2(I), 4(4)**
- F123** Word in Sch. 5 Pt. 1 para. 10(2)(c) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(iii)(cc)**; 2020 c. 1, Sch. 5 para. 1(1)
- F124** Sch. 5 Pt. 1 para. 10(2)(d) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(iii)(dd)**; 2020 c. 1, Sch. 5 para. 1(1)

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- F125** Sch. 5 Pt. 1 para. 10(2A) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(iv)**; 2020 c. 1, Sch. 5 para. 1(1)
- F126** Words in Sch. 5 Pt. 1 para. 10(3)(a) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(v)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)
- F127** Sch. 5 Pt. 1 para. 10(3)(aa) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(v)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)
- F128** Words in Sch. 5 Pt. 1 para. 10(4) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(vi)(aa)**; 2020 c. 1, Sch. 5 para. 1(1)
- F129** Words in Sch. 5 Pt. 1 para. 10(4) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(a)(vi)(bb)**; 2020 c. 1, Sch. 5 para. 1(1)

### Duty to consider representations

**11.** Before it determines an application or makes a regulator-initiated variation, the regulator must consider any representation—

- (a) made pursuant to paragraph 6(1)(b), 8(2)(b) or 9(4)(c), or
- (b) sent to it under paragraph 10(3)(b).

### Duty to determine an application

**12.—**(1) The regulator must grant or refuse a duly-made application.

(2) Except in the case of an application for the surrender of an environmental permit in whole, the regulator may grant an application subject to such conditions as it sees fit.

(3) But—

- (a) variations of an environmental permit in relation to the grant of an application for variation, transfer in whole or in part, or partial surrender must be in consequence of the variation, transfer or partial surrender, as the case may be and
- (b) if granting an application for partial transfer, the regulator must grant a new environmental permit to the transferee subject to the same conditions as the original permit, varied in consequence of the partial transfer.

### Identity and competence of the operator

**13.—**(1) Subject to sub-paragraph (3), the regulator must refuse an application for the grant of an environmental permit or for the transfer in whole or in part of an environmental permit if it considers that, if the permit is granted or transferred, the requirements in sub-paragraph (2) will not be satisfied.

(2) The requirements are that the applicant for the grant of an environmental permit, or the proposed transferee, on the transfer of an environmental permit (in whole or in part), must—

- (a) be the operator of the regulated facility, and
- (b) operate the regulated facility in accordance with the environmental permit.

(3) The requirement in sub-paragraph (2)(b) does not apply to an applicant for the grant of an environmental permit authorising the carrying on of only a stand-alone water discharge activity, stand-alone groundwater activity or stand-alone flood risk activity.

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### Surrender applications

14.—(1) The regulator must accept an application for the surrender of an environmental permit in whole or in part under regulation 25(2) if it is satisfied that the necessary measures have been taken—

- (a) to avoid a pollution risk resulting from the operation of the regulated facility and, in the case of a permit authorising the carrying on of a flood risk activity (in whole or in part), to avoid any of the risks specified in sub-paragraph (3), and
- (b) to return the site of the regulated facility to a satisfactory state, having regard to the state of the site before the facility was put into operation.

(2) Sub-paragraph (1) does not apply to an application for the surrender of any part of an environmental permit (or if applicable, the whole permit) that authorises the carrying on of a radioactive substances activity at a nuclear site.

(3) The risks specified in this sub-paragraph are—

- (a) risk of flooding;
- (b) risk of harm to the environment;
- (c) risk of detrimental impact on drainage.

### Time limits for determination

15.—(1) If—

- (a) the regulator has not determined an application within the relevant period, and
- (b) the applicant serves a notice on the regulator which refers to this paragraph,

the application is deemed to have been refused on the day on which the notice is served.

(2) Sub-paragraph (1) does not apply—

- (a) to an application for the grant of an environmental permit that, if granted, would authorise the carrying on of a radioactive substances activity at a nuclear site, or
- (b) to an application for the transfer of an environmental permit where the permit authorises the carrying on of a radioactive substances activity at a nuclear site.

(3) In sub-paragraph (1) “the relevant period” means a period, calculated in accordance with paragraph 16, of—

- (a) in the case of an application for the transfer of an environmental permit in whole or in part, 2 months,
- (b) in the case of an application for the grant or variation, in whole or in part, of an environmental permit relating to a stand-alone flood risk activity only, 2 months,
- (c) in a case where paragraph 6 applies, 4 months, or
- (d) in any other case, 3 months,

or in any case, a longer period than the period in paragraphs (a) to (d), if it is agreed by the regulator and the applicant.

### Calculation of the relevant period

16.—(1) This paragraph provides for the calculation of a period referred to in paragraph 15(3).

(2) The period starts—

- (a) in the case of an application for the grant or variation of an environmental permit in relation to a Category A mining waste facility—



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- (i) on the day the regulator is notified by the fire and rescue authority of the matters referred to in paragraph 14(1) of Schedule 20, and for these purposes “fire and rescue authority” has the meaning given in paragraph 2 of that Schedule, or
  - (ii) if paragraph 10 of this Schedule applies, on the day mentioned in sub-paragraph (i) of this paragraph or, if the day on which the appropriate authority complies with paragraph 10(3) of this Schedule is later, on that day;
  - (b) if paragraph 10 of this Schedule applies and the application is not one covered by paragraph (a), on the day the appropriate authority complies with paragraph 10(3) of this Schedule;
  - (c) in all other cases, on the day the regulator receives a duly-made application.
- (3) In calculating the period the following periods must be ignored—
- (a) a period beginning with the service of a notice requiring further information under paragraph 4(1) to the receipt by the regulator of that information;
  - (b) a period for representations mentioned in paragraph 9(4)(c) to the extent that it does not overlap with a period for representations mentioned in paragraph 6(1)(c);
  - (c) a period of 20 days after the service of a notice under regulation 15(5);
  - (d) where regulation 15(6) applies, a period beginning with the day on which the regulator informs the applicant of the proposed condition and ending when the regulator is satisfied that the landowner has consented to that condition;
  - (e) a period during which national security or confidentiality is being considered in relation to the application, that is to say—
    - (i) any period during which a determination under regulation 47(3) or (7) or 50 is being considered (including any appeal), or
    - (ii) a period of 15 working days after the service of a notice under regulation 49(1);
  - (f) if the regulator informs the public in relation to a draft decision in accordance with paragraph 1(d) of Annex IV to the Industrial Emissions Directive, a period of 20 working days.

### Notification of a determination or decision

17.—(1) As soon as is reasonably practicable after it determines an application or decides to make a regulator-initiated variation, the regulator must comply with [F130 sub-paragraphs (2) and (2A)].

- (2) The regulator must—
- (a) notify the applicant or, for a regulator-initiated variation, the operator of—
    - (i) its determination or decision,
    - (ii) the rights of appeal the applicant or operator has under regulation 31, and
    - (iii) the requirements relating to the exercise of those rights in paragraphs 2 and 3 of Schedule 6, and
  - (b) if paragraph 10 applies, notify the appropriate authority of the determination or decision.

[F131(2A) Where paragraph 10 applies to an application or regulator-initiated variation relating to an installation described in paragraph 10(5), the regulator must—

- (a) notify the authorities of the member State consulted in accordance with paragraph 10(2A)
  - (a) of the determination or decision, and
- (b) provide those authorities with the information described in Article 24(2) of the Industrial Emission Directive.]

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(3) In this paragraph, “determination” and “decision” include the reasons for the determination or decision.

#### Textual Amendments

**F130** Words in Sch. 5 Pt. 1 para. 17(1) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(b)(i)**; 2020 c. 1, Sch. 5 para. 1(1)

**F131** Sch. 5 Pt. 1 para. 17(2A) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(10)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Date of effect of certain determinations and decisions

**18.**—(1) This paragraph applies to—

- (a) a determination by which the regulator grants an application which—
  - (i) varies an environmental permit in consequence of an application for variation, transfer in whole or in part, or partial surrender, or
  - (ii) grants a new environmental permit in consequence of an application for partial transfer, and
- (b) a decision to make a regulator-initiated variation.

(2) The determination or decision must specify any variation and the date it is to take effect.

(3) If the regulator grants an application for the transfer of an environmental permit in whole or in part, the determination must specify the date agreed between the regulator and the applicant that the transfer is to take effect.

#### Form of certain determinations and decisions: consolidation of permits

**19.**—(1) This paragraph applies to every determination and decision to which paragraph 18 applies.

- (2) A determination or decision may comprise—
  - (a) a consolidated permit reflecting the variations, and
  - (b) a notice specifying the variations included in that consolidated permit.
- (3) Only the variations specified are subject to the right of appeal in regulation 31(1)(b) or (c).

#### Incidents and accidents: deemed condition of a permit

**20.** Every environmental permit in relation to a regulated facility to which Schedule 7, 13 or 14 applies is deemed to contain the following conditions, unless such conditions are included in the permit—

- (a) in the event that the operation of a regulated facility gives rise to an incident or accident which significantly affects the environment, the operator of that regulated facility must immediately—
  - (i) inform the regulator,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;

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- (b) in the event of a breach of any condition of a permit, the operator of a regulated facility must immediately—
  - (i) inform the regulator, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of any condition of a permit which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator of a regulated facility must immediately suspend the operation of the regulated facility or the relevant part of it until compliance with the condition of the permit has been restored.

## PART 2

### Compensation in relation to conditions affecting certain interests in land

#### Interpretation

1. In this Part—

“grantor” means a person who grants the operator rights pursuant to regulation 15(2);

“relevant interest” means an interest in land out of which rights have been granted pursuant to regulation 15(2);

“rights” means the rights granted by the grantor.

#### Entitlement to compensation

2. A grantor is entitled to be paid compensation under this Part by the operator.

#### Loss and damage for which compensation is payable

3.—(1) Subject to paragraph 6(3) and (5)(b), compensation is payable for loss and damage of the following descriptions—

- (a) depreciation in the value of any relevant interest to which the grantor is entitled which results from the grant of the rights;
- (b) depreciation in the value of any other interest in land to which the grantor is entitled which results from the exercise of the rights;
- (c) loss or damage, in relation to any relevant interest to which the grantor is entitled, which—
  - (i) is attributable to the grant of the rights or the exercise of them,
  - (ii) does not consist of depreciation in the value of that interest, and
  - (iii) is loss or damage for which the grantor would have been entitled to compensation by way of compensation for disturbance if the circumstances specified in subparagraph (2) applied;
- (d) damage to, or injurious affection of, any interest in land to which the grantor is entitled which—
  - (i) is not a relevant interest, and
  - (ii) results from the grant of the rights or the exercise of them;
- (e) loss in respect of work carried out by or on behalf of the grantor which is rendered abortive by the grant of the rights or the exercise of them.

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(2) For the purpose of sub-paragraph (1)(c)(iii), the circumstances are that the relevant interest was acquired compulsorily—

- (a) under the Acquisition of Land Act 1981 <sup>M98</sup>, and
- (b) in pursuance of a notice to treat served on the date on which the rights were granted.

#### Marginal Citations

M98 1981 c. 67.

#### Date when entitlement to compensation arises

4.—(1) An entitlement to compensation under this Part arises on the date of the grant of the rights.

(2) But if an appeal against the conditions of the environmental permit which rendered the grant of rights necessary is refused, the entitlement to compensation arises on the date the appeal is determined.

#### Application for compensation

5.—(1) An application for compensation under this Part must be made by the grantor—

- (a) within 12 months after the date on which the entitlement to compensation arises, or
- (b) within 6 months after the date on which the rights are first exercised.

(2) An application must be—

- (a) made in writing,
- (b) made to the operator to whom the rights were granted, and
- (c) delivered at or sent by pre-paid post to the last known address for correspondence of that operator.

(3) The application must contain, or be accompanied by—

- (a) a copy of the grant of rights in respect of which the grantor's entitlement arises and any plans attached to that grant,
- (b) a description of the exact nature of any interest in land in respect of which compensation is applied for,
- (c) a statement of the amount of compensation applied for—
  - (i) distinguishing the amounts applied for under each of paragraph 3(1)(a) to (e), and
  - (ii) showing how the amount applied for under each paragraph has been calculated, and
- (d) if the date on which the entitlement to compensation arises is ascertained in accordance with paragraph 4(2), a copy of the notice of the final determination of the appeal.

#### Assessment of the amount to be paid by way of compensation

6.—(1) The amount to be paid by way of compensation under this Part must be assessed in accordance with this paragraph.

(2) The rules set out in section 5 of the Land Compensation Act 1961 <sup>M99</sup> have effect for the purposes of this paragraph as they have effect for the purpose of assessing compensation for the compulsory acquisition of an interest in land, so far as applicable and subject to any necessary modifications.

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(3) No account is to be taken of any enhancement of the value of an interest in land by reason of any building erected, work done, or improvement or alteration made on land in which the grantor is, or was at the time the building or other work was carried out, directly or indirectly concerned, if the work carried out—

- (a) was not reasonably necessary, and
- (b) was undertaken with a view to obtaining compensation or increased compensation.

(4) In calculating the amount of a loss under paragraph 3(1)(e), expenditure incurred in the preparation of plans or on other similar preparatory matters is to be taken into account.

(5) Where the interest in respect of which compensation is to be assessed is subject to a mortgage—

- (a) the compensation must be assessed as if the interest were not subject to the mortgage, and
- (b) no compensation is payable in respect of the interest of the mortgagee (as distinct from the interest which is subject to the mortgage).

(6) Compensation must include an amount equal to the grantor's reasonable valuation and legal expenses incurred as a result of making the application under paragraph 5 to which the compensation relates.

#### Marginal Citations

**M99** 1961 c. 33; section 5 was amended by paragraph 1 of Schedule 15, and Part 3 of Schedule 19, to the [Planning and Compensation Act 1991 \(c. 34\)](#), and by [S.I. 2009/1307](#).

#### Payment of compensation

7.—(1) Compensation in respect of an interest which is subject to a mortgage must be paid—

- (a) to the mortgagee, or
- (b) if there is more than one mortgagee, to the first mortgagee,

and must, in either case, be applied by the mortgagee as if it were proceeds of sale.

(2) Amounts of compensation determined under this Part are payable—

- (a) where the operator and either the grantor or mortgagee agree that a single payment is to be made on a specified date, on that date;
- (b) where the operator and either the grantor or mortgagee agree that payment is to be made in instalments at different dates, on the date agreed as regards each instalment;
- (c) in any other case, subject to any direction of the Upper Tribunal or the court, as soon as reasonably practicable after the amount of the compensation has been determined.

(3) Any question of the application of paragraph 6(3) or dispute as to the amount of compensation must be referred to and determined by the Upper Tribunal.

(4) In relation to the determination of such a question, section 4 of the Land Compensation Act 1961 <sup>M100</sup> applies as if the reference in section 4(A1) of that Act to section 1 of that Act <sup>M101</sup> were a reference to sub-paragraph (3) of this paragraph.

#### Marginal Citations

**M100** Section 4 was amended by [S.I. 2009/1307](#).

**M101** Section 1 was amended by [S.I. 2009/1307](#).

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### Interest payable on compensation

8.—(1) Compensation payable under this Part carries interest at the rate for the time being prescribed under section 32 of the Land Compensation Act 1961 from the date specified in sub-paragraph (2) to payment.

(2) The date is—

- (a) in the case of compensation payable under paragraph 3(1)(a) or (b), the date of depreciation;
- (b) in the case of compensation payable under paragraph 3(1)(c), (d) or (e), the date on which the loss is sustained, the damage is done, or the injurious affection occurs, as the case may be;
- (c) in the case of compensation payable under paragraph 6(6), the date on which the expenses become payable.

(3) If it appears to a person (“A”) that A may become liable to pay to another person (“B”) compensation under this Schedule or interest under this paragraph, on the written request of B, A may make one or more payments on account of such compensation or interest.

(4) A may recover the payment or excess if, after A makes a payment under sub-paragraph (3)—

- (a) it is agreed or determined that A is not liable to pay compensation or interest, or
- (b) by reason of any agreement or determination, the payment is shown to be excessive.

## SCHEDULE 6

Regulation 31(12)

### Appeals to the appropriate authority

#### Interpretation

1. In this Schedule—

- “appeal” means an appeal to the appropriate authority;
- “appointed person” means the person appointed under paragraph 5;
- “determination” includes the reasons for the determination.

#### Making an appeal

2.—(1) A person making an appeal must—

- (a) send the appropriate authority written notice of the appeal and the documents specified in sub-paragraph (2), and
- (b) at the same time send the regulator copies of the notice and documents.

(2) The documents are—

- (a) a statement of the grounds of appeal,
- (b) a copy of any relevant application,
- (c) a copy of any relevant environmental permit,
- (d) a copy of any relevant correspondence between the appellant and the regulator,
- (e) a copy of any decision or notice which is the subject matter of the appeal, and
- (f) a statement indicating whether the appellant wishes the appeal to be in the form of a hearing or to be dealt with by way of written representations.

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(3) An appellant may withdraw an appeal by notifying the appropriate authority in writing and must send a copy of that notification to the regulator.

### **Time limit for making an appeal**

3.—(1) A notice of appeal must be given—

- (a) in relation to an appeal against a revocation notice, before the revocation notice takes effect;
- (b) in relation to the withdrawal of a duly-made application under paragraph 4(2) of Part 1 of Schedule 5, not later than 15 working days after the date of the further notice served under that paragraph;
- (c) in relation to an enforcement notice, a regulator-initiated variation, suspension notice, mining waste facility closure notice, landfill closure notice, flood risk activity emergency works notice, flood risk activity notice of intent or flood risk activity remediation notice, not later than 2 months after the date of the variation or notice;
- (d) in relation to a prohibition notice, not later than 21 days after the date of the notice;
- (e) in any other case, not later than 6 months after the date of the decision or deemed decision.

(2) The appropriate authority may in a particular case allow notice of appeal to be given after the periods mentioned in sub-paragraph (1)(b) to (e) have expired.

### **Notice to affected and interested persons**

4.—(1) The regulator must, within 10 working days after receipt of a copy of a notice of appeal, give notice of it to any person whom the regulator considers is affected by, is likely to be affected by, or has an interest in, the subject matter of the appeal.

(2) A notice must include—

- (a) a description of the subject matter of the appeal, and
- (b) a statement that representations in writing may be made to the appropriate authority within a period of 15 working days after the date of the notice.

(3) The regulator must notify the appropriate authority of the persons to whom, and the date on which, such a notice was sent, within 10 working days after sending it.

(4) The regulator must give notice of the withdrawal of an appeal to every person given such a notice.

### **Hearing before an appointed person**

5.—(1) Before determining an appeal the appropriate authority may give the appellant and the regulator an opportunity of appearing before and being heard by a person appointed by the appropriate authority, and must do so in a case where a request is duly made by the appellant or the regulator to be so heard.

(2) If the appointed person so decides, a hearing may be held wholly or to any extent in private.

(3) The persons entitled to be heard at a hearing are—

- (a) the appellant,
- (b) the regulator, and
- (c) a person who has made representations to the regulator in respect of the subject matter of the appeal within the period mentioned in paragraph 4(2)(b).

(4) The appointed person may permit other persons to be heard and such permission must not be unreasonably withheld.

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(5) After the hearing, the appointed person must make a report in writing to the appropriate authority which must include the appointed person's—

- (a) conclusions, and
- (b) recommendations or reasons for not making recommendations.

(6) Subsections (2) to (5) of section 250 of the Local Government Act 1972 <sup>M102</sup> apply to hearings held under this paragraph by an appointed person as they apply to inquiries caused to be held under that section by a Minister with the following modifications—

- (a) the substitution in subsection (2) for the reference to the person appointed to hold the inquiry with a reference to the appointed person;
- (b) the substitution in subsection (4) for the references to the Minister causing the inquiry to be held with references to the appropriate authority;
- (c) the substitution of the reference in that subsection to a local authority with a reference to the regulator;
- (d) the substitution in subsection (5) for the reference to the Minister causing the inquiry to be held with a reference to the appropriate authority.

#### Marginal Citations

**M102** 1972 c. 70; section 250 was amended by sections 37, 38 and 46 of the [Criminal Justice Act 1982 \(c. 48\)](#), [Part 3](#) of Schedule 12 to the [Housing and Planning Act 1986 \(c. 63\)](#) and the [Statute Law Repeals Act 1989 \(c. 43\)](#).

#### Notice of determination of an appeal

**6.—**(1) The appropriate authority must give notice to the appellant of its determination and provide the appellant with a copy of the report mentioned in paragraph 5(5).

- (2) At the same time the appropriate authority must send—
  - (a) a copy of the documents mentioned in sub-paragraph (1) to the regulator, and
  - (b) a copy of its determination to any person who made representations in respect of the subject matter of the appeal to the authority, or at any hearing.

#### Procedure following the quashing of a determination of an appropriate authority

- 7.—**(1) If a determination is quashed in proceedings before a court, the appropriate authority—
  - (a) must send to the persons notified of its determination under paragraph 6 a statement of the matters in relation to which further representations are invited,
  - (b) must give those persons the opportunity of making written representations in respect of those matters within 20 working days after the date of the statement, and
  - (c) may cause a hearing to be held or reopened.

(2) If a hearing is held or reopened under sub-paragraph (1)(c), paragraphs 5(2) to 5(6) apply as they apply to a hearing held under paragraph 5(1).

(3) Paragraph 6 applies to the redetermination of an appeal as it applies to the determination of that appeal.



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SCHEDULE 7

Regulation 35(1)

Part A installations: Industrial Emissions Directive

**Application**

- 1. This Schedule applies to every Part A installation.

**Interpretation**

- <sup>F132</sup>2. ....

**Textual Amendments**  
**F132** Sch. 7 para. 2 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(11)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of regulator's functions: general**

- 3. The regulator must exercise its functions under these Regulations for the purpose of achieving a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.

**Applications for the grant of an environmental permit**

- 4. The regulator must ensure that every application for the grant of an environmental permit includes the information specified in Article 12 of the Industrial Emissions Directive.

**Exercise of relevant functions**

- 5. The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive—

- (a) Article 5(1) and (3);
- (b) Article 7;
- (c) Article 8(2);
- (d) Article 9;
- (e) Article 11;
- (f) Article 13(7);
- (g) Article 14;
- (h) Article 15 <sup>F133</sup> ... ;
- (i) Article 16;
- (j) Article 17;
- (k) Article 18;
- (l) Article 20(1) and (2);
- (m) Article 22 <sup>F134</sup> ... ;

- <sup>F135</sup>(n) .....

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Textual Amendments

- F133** Words in Sch. 7 para. 5(h) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(11)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F134** Words in Sch. 7 para. 5(m) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(11)(b)(iii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F135** Sch. 7 para. 5(n) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(11)(c)**; 2020 c. 1, Sch. 5 para. 1(1)

### Developments in best available techniques

6.—(1) The regulator must ensure that it is informed of developments in best available techniques and of the publication of any new or updated BAT conclusions and where appropriate must exercise its functions so as to encourage the application of emerging techniques, in particular those identified in BAT reference documents.

(2) In this paragraph—

“BAT conclusions” has the meaning given in Article 3(12) of the Industrial Emissions Directive;

“BAT reference document” has the meaning given in Article 3(11) of the Industrial Emissions Directive;

“best available techniques” has the meaning given in Article 3(10) of the Industrial Emissions Directive;

“emerging technique” has the meaning given in Article 3(14) of the Industrial Emissions Directive.

### Review of environmental permits

7. The regulator must review an environmental permit in accordance with Article 21 of the Industrial Emissions Directive if any of the circumstances in that Article applies in relation to the Part A installation whose operation the permit authorises.

### Public participation

8. The regulator must exercise its functions so as to meet the requirements of Article 24 of the Industrial Emissions Directive.

### Inspections

9. When inspecting a regulated facility in accordance with regulation 34(2) the regulator must comply with Article 23 of the Industrial Emissions Directive.

## SCHEDULE 8

Regulation 35(1)

### Part B installations and Part B mobile plant etc.

#### Application

1.—(1) Subject to sub-paragraph (2), in England and Wales, this Schedule applies in relation to every Part B installation.

(2) Where installations are Part B installations solely because of the aggregation of the net rated thermal input of two or more appliances in accordance with paragraph 2 under the heading “Interpretation and application of Part B” in Section 1.1 of Part 2 of Schedule 1, only paragraph 4(1) (a) of this Schedule applies to those installations (in addition to the provisions in Schedule 24).

(3) In Wales only, this Schedule also applies in relation to every small waste incineration plant (in addition to the provisions in Schedule 13) and in relation to every solvent emission activity (in addition to the provisions in Schedule 14).

#### Interpretation

2. For the purposes of this Schedule—

“best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values relevant to air pollution designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole, where—

- (a) “techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- (b) “available techniques” means those techniques developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, and which are reasonably accessible to the operator;
- (c) “best” means most effective in achieving a high general level of protection of the environment as a whole;

“installation” means a Part B installation, Part B mobile plant, small waste incineration plant or solvent emission activity.

#### Exercise of regulator's functions: general

3. The regulator must exercise its functions under these Regulations for the purpose of preventing or, where that is not practicable, reducing emissions into the air.

#### Applications for the grant of an environmental permit

4.—(1) The regulator must ensure that every application for the grant of an environmental permit includes the following information—

- (a) the installation and its activities;
- (b) the sources of emissions to air from the installation;
- (c) the nature and quantities of foreseeable emissions into the air from the installation as well as identification of significant effects of those emissions on the environment;
- (d) the proposed technology or other techniques for preventing, or where that is not possible, reducing emissions to air from the installation;

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- (e) further measures planned to ensure that the installation is operated in such a way that—
  - (i) all appropriate preventive measures are taken against pollution, in particular through the application of best available techniques, and
  - (ii) no significant pollution is caused;
- (f) measures planned to monitor emissions into the air;
- (g) the main alternatives, if any, to the techniques or measures required in paragraphs (d) to (f);
- (h) a non-technical summary of the details referred to in paragraphs (a) to (g).

(2) Sub-paragraph (1)(d) does not apply to the extent that the application relates to the burning of waste oil in an appliance with a net rated thermal input of less than 0.4 megawatts at a Part B installation.

(3) In the case of a new installation or a substantial change where Article 4 of Directive 2011/92/EU of the European Parliament and of the Council on the assessment of the effects of certain public and private projects on the environment <sup>M103</sup> applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6 or 7 of that Directive shall be taken into consideration by the regulator for the purposes of granting the environmental permit.

[<sup>F136</sup>(4) In sub-paragraph (3), a reference to a numbered Article of Directive 2011/92/EU is to be construed as a reference to the EU-derived domestic legislation which transposed that Article in respect of England and Wales.]

**Textual Amendments**

**F136** Sch. 8 para. 4(4) inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(12)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

**Marginal Citations**

**M103** OJ No L 26, 28.1.2012, p 1, as last amended by Directive 2014/52/EU (OJ No L 124, 25.4.2014, p 1).

**Exercise of relevant functions**

5.—(1) The regulator must, for the purpose of preventing or, where that is not practicable, reducing emissions into the air, exercise its relevant functions in relation to the installations to which this Schedule applies—

- (a) so as to ensure that they are operated in such a way that—
  - (i) appropriate preventive measures are taken against air pollution, in particular through the application of best available techniques;
  - (ii) no significant air pollution is caused;
- (b) where an environmental quality standard requires stricter conditions than those achievable by the use of best available techniques, additional measures are required by the permit, without prejudice to other measures which might be taken to comply with environmental quality standards;
- (c) permits include emission limit values, which may if appropriate be supplemented or replaced by equivalent parameters or technical measures, for polluting substances likely to be emitted into the air from the installation concerned in significant quantities;

<sup>F137</sup>(d) .....

(2) The regulator must ensure that emission limit values or equivalent parameters or technical measures are based on best available techniques without prescribing the use of any technique or

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specific technology, but taking into account the technical characteristics of the installation, including (except in the case of mobile plant) its geographical location and the local environmental conditions.

(3) In this paragraph “substance” means any chemical element and its compounds and any biological entity or micro-organism, with the exception of the following substances—

- (a) radioactive substances as defined in [<sup>F138</sup>Article 4] of the Basic Safety Standards Directive;
- (b) genetically modified micro-organisms as defined in Article 2(b) of Directive 2009/41/EC of the European Parliament and of the Council on the contained use of genetically modified micro-organisms <sup>M104</sup>;
- (c) genetically modified organisms as defined in point 2 of Article 2 of Directive 2001/18/EC of the European Parliament and of the Council on the deliberate release into the environment of genetically modified organisms <sup>M105</sup>.

#### Textual Amendments

**F137** Sch. 8 para. 5(1)(d) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(12)(b); 2020 c. 1, Sch. 5 para. 1(1)

**F138** Words in Sch. 8 para. 5(3)(a) substituted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), regs. 1, 6

#### Marginal Citations

**M104** OJ No L 125, 21.5.2009, p 75.

**M105** OJ No L 106, 17.4.2001, p 1, as last amended by Directive (EU) 2015/412 (OJ No L 68, 13.3.2015, p 1).

### Change in operation

6.—(1) Operators holding environmental permits for installations to which this Schedule applies must notify the regulator of any substantial change in the operation of that installation.

(2) Where there is a substantial change in the operation of an installation, the regulator must ensure that the environmental permit is reviewed and, if necessary, updated.

### Review of permits

7. The regulator must review an environmental permit where—

- (a) the air pollution caused by the installation is of such significance that the existing emission limit values of the permit need to be revised or new values need to be included in the permit,
- (b) substantial changes in best available techniques make it possible to reduce emissions significantly without imposing excessive costs,
- (c) the operational safety of the process or activity requires other techniques to be used, or
- (d) new legislation necessitates a review.

### Developments in best available techniques

8. The regulator must ensure that it is informed of developments in best available techniques.

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## SCHEDULE 9

Regulation 35(1)

## Waste operations and materials facilities

**PART 1**

## Waste operations

**Application**

1. This Schedule applies in relation to every waste operation.

**Interpretation**

2. In this Schedule—

“disposal” has the same meaning as in the Waste Framework Directive and related terms are to be construed accordingly;

“recovery” has the same meaning as in the Waste Framework Directive and related terms are to be construed accordingly.

**Exercise of relevant functions**

- 3.—(1) The regulator must exercise its relevant functions—

- (a) for the purposes of ensuring that—

- (i) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by a waste operation;

- (ii) waste generated by a waste operation is treated in accordance with Article 4 of the Waste Framework Directive;

- (b) for the purposes of [F139ensuring the objectives of Article 13 of the Waste Framework Directive are met], but not in respect of nuisances and hazards arising from traffic beyond the site of a waste operation;

- (c) so as to ensure that the requirements in the second paragraph of Article 23(1) of the Waste Framework Directive are met;

- (d) so as to ensure compliance with the following Articles of the Waste Framework Directive—

- (i) Article 18(2)(b) and (c);

- (ii) Article 23(3);

- (iii) Article 23(4);

- (iv) Article 35(1).

(2) But the following duties take effect in relation to an environmental permit which was in force on the date of coming into force of the Waste (England and Wales) Regulations 2011<sup>M106</sup> on the first review of the permit by the regulator (under regulation 34(1)) after that date—

- (a) the duty in sub-paragraph (1)(a), (d)(i) and (d)(iii);

- (b) the duty in sub-paragraph (1)(c), to the extent that it is imposed in relation to Article 23(1)(e) and (f).

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#### Textual Amendments

**F139** Words in Sch. 9 Pt. 1 para. 3(1)(b) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(13)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Marginal Citations

**M106** S.I. 2011/988, amended by S.I. 2011/600 (W. 88), 2043, 2012/767, 1889, 2013/141, 755 (W. 90), 2014/656, 2015/483, 1360, 1417 (W. 141), 1640, 2016/58 (W. 28), 691 (W. 189) and 738.

## PART 2

### Materials facilities

#### CHAPTER 1

##### Introductory provisions, conditions and functions

#### Assessment and notification

1.—(1) At the start of each reporting period, the operator of a materials facility must assess the amount of <sup>F140</sup>... waste material that facility is likely to receive during the relevant year by having regard to—

- (a) the amount of <sup>F140</sup>... waste material received at that facility during the period of 12 months immediately preceding the start of that reporting period, and
- (b) the anticipated amount of <sup>F140</sup>... waste material that will be received by that facility during the relevant year.

(2) The operator must notify the regulator [<sup>F141</sup>in writing] before the end of the reporting period if the assessment undertaken at the start of that period indicates that the materials facility is likely to receive a minimum of 1,000 tonnes of <sup>F140</sup>... waste material during the relevant year.

(3) Where the operator has given a notification under sub-paragraph (2), no further notification is required under that sub-paragraph in relation to any subsequent assessment, for so long as that notification is not withdrawn.

(4) The operator may withdraw, in writing, a notification given under sub-paragraph (2) at any time if the operator considers that the materials facility is not likely to receive a minimum of 1,000 tonnes of <sup>F140</sup>... waste material during the relevant year.

(5) In this paragraph, “relevant year” means the period of 12 months that commences on the first day of a reporting period.

#### Textual Amendments

**F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(2)**

**F141** Words in Sch. 9 Pt. 2 para. 1(2) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(3)**

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## Interpretation

2.—(1) In this <sup>F142</sup>Part] —

<sup>F143</sup>“drink” means—

- (a) water suitable for human consumption,
- (b) a beverage suitable for human consumption,
- (c) a sports drink suitable for human consumption, or
- (d) a liquid which constitutes a beverage or sports drink suitable for human consumption if it is—
  - (i) diluted,
  - (ii) combined with crushed ice, or processed so as to create crushed ice,
  - (iii) combined with carbon dioxide, or
  - (iv) prepared by way of a process that involves any combination of the processes mentioned in paragraphs (i) to (iii) and includes, for example, fruit squash or fruit cordial;]

<sup>F143</sup>“drink container” means a bottle or can in which a drink is supplied and which—

- (a) is made wholly or mainly from polyethelene terephthalate (PET) plastic, steel or aluminium,
- (b) has a capacity of at least 50 millilitres but no more than three litres of liquid,
- (c) when it is filled for supply, is securely closed, and
- (d) is designed to be used only once, or for a short period of time, before being discarded, together with any label applied to it and its lid or other closures;]

<sup>F143</sup>“fibre-based composite material” means packaging material which is made of paperboard or paper fibres, laminated with plastic, and which may also have layers of other materials, to form a single unit that cannot be separated by hand;]

“material particles” means—

- (a) for specified output material that is made up in largest proportion of glass material, particles of that material that measure less than 13 millimetres along their longest dimension, and
- (b) in relation to all other types of specified output material and for <sup>F140</sup>... waste material, particles of material measuring less than 55 millimetres along their longest dimension;

“materials facility” means, subject to sub-paragraph (2), a regulated facility or part of a regulated facility that receives <sup>F140</sup>... waste material <sup>F144</sup>in order to—

- (a) separate it into specified output material, or
- (b) consolidate it into bulk quantities (whether as a first point of consolidation for such waste or following the first consolidation of bulk quantities transferred from other suppliers),

for the purpose of selling it, or transferring it to other facilities or persons to enable that material to be prepared for re-use or recycling;]

<sup>F145</sup> ...

“non-recyclable material” means waste material that is not capable of being recycled;

“non-target material” means material that is capable of being recycled but is not a target material;



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[<sup>F146</sup>“packaging” means all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer, including non-returnable items used for the same purposes, but only where the products are—

- (a) primary packaging, which is packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase;
- (b) secondary packaging, which is packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is supplied as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale; it can be removed from the product without affecting the product’s characteristics;
- (c) tertiary packaging, which is packaging conceived so as to facilitate handling and transport of a number of sales units or secondary packaging in order to prevent damage from physical handling and transport damage and for these purposes tertiary packaging does not include road, rail, ship and air containers;
- (d) shipment packaging, which is packaging in addition to primary packaging on items which are sold online or by mail order which are either delivered direct to the purchaser or collected by the purchaser from a shop or other collection point after they have been purchased;]

“reporting period” means any of the following periods—

- (a) 1st January to 31st March;
- (b) 1st April to 30th June;
- (c) 1st July to 30th September;
- (d) 1st October to 31st December;

“specified output material” means a batch of material (whether or not waste) that is—

- (a) produced from a separating process for <sup>F140</sup>... waste material, and
- (b) [<sup>F147</sup>made up of one or more of the following kinds of material—
  - (i) glass;
  - (ii) metal;
  - (iii) paper;
  - (iv) card;
  - (v) plastic;
  - (vi) fibre-based composite material;]

[<sup>F148</sup>“sports drink” means a drink which is advertised or marketed as a product to enhance physical performance, accelerate recovery after exercise or build bulk, or other similar drink;]

“target material” means [<sup>F149</sup>material (whether of one kind or more)] that is identified by the operator of a materials facility as destined [<sup>F150</sup>(whether by that facility or by other facilities or persons)] to be separated out from <sup>F140</sup>... waste material [<sup>F151</sup>or consolidated] in order to produce bulk quantities of that identified material;

[<sup>F152</sup>“waste material” means waste that—

- (a) is household waste, or originates from a source other than household waste but is similar to household waste in terms of its nature or composition,

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- (b) has been separately collected (whether as a single kind of material or two or more kinds of material mixed together) for the primary purpose of preparing it for re-use or recycling, and
  - (c) consists (whether wholly or in part) of any of the following kinds of material—
    - (i) glass;
    - (ii) metal;
    - (iii) paper;
    - (iv) card;
    - (v) plastic;
    - (vi) fibre-based composite material.]
- (2) In this <sup>F153</sup>Part] —
- <sup>F154</sup>(a) any reference to a “materials facility” excludes a facility or part of a facility—
- (i) at which all the waste material received during a reporting period is attributable exclusively to a single supplier, unless the waste material so received is separated into specified output material at that facility;
  - (ii) that is provided pursuant to arrangements made under section 51(1)(b) of the 1990 Act by an authority that is a waste disposal authority within the meaning of section 30(2) of that Act;
  - (iii) that undertakes the processing or sorting of WEEE, waste batteries or accumulators;]
- (b) references to <sup>F155</sup>“recycling,” “recycled” or “recyclable” are to be construed in accordance with the meaning of “recycling” given in Article 3(17) of the Waste Framework Directive.
- <sup>F156</sup>(3) For the purposes of this Part, in relation to a batch of waste material received at a materials facility—
- (a) where that batch comprises material collected pursuant to arrangements made under section 45(1)(a) or (b) of the 1990 Act by an authority that is a waste collection authority within the meaning of section 30(3) of that Act, that authority is the supplier, except in a case falling within paragraph (b);
  - (b) where that batch has been transferred from another materials facility, the operator of the materials facility from which that material was transferred is the supplier;
  - (c) in a case not falling within paragraph (a) or (b), the person who collected the material or, if that person is not known, the person responsible for delivering it to the materials facility is the supplier.]

#### Textual Amendments

- F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(2)**
- F142** Word in Sch. 9 Pt. 2 para. 2(1) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(4)(a)**
- F143** Words in Sch. 9 Pt. 2 para. 2(1) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(4)(b)**
- F144** Words in Sch. 9 Pt. 2 para. 2(1) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(4)(c)**
- F145** Words in Sch. 9 Pt. 2 para. 2(1) omitted (1.10.2024) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(4)(d)**

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- F146** Words in Sch. 9 Pt. 2 para. 2(1) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(e)**
- F147** Words in Sch. 9 Pt. 2 para. 2(1) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(f)**
- F148** Words in Sch. 9 Pt. 2 para. 2(1) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(g)**
- F149** Words in Sch. 9 Pt. 2 para. 2(1) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(h)(i)**
- F150** Words in Sch. 9 Pt. 2 para. 2(1) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(h)(ii)**
- F151** Words in Sch. 9 Pt. 2 para. 2(1) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(h)(iii)**
- F152** Words in Sch. 9 Pt. 2 para. 2(1) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(4)(i)**
- F153** Word in Sch. 9 Pt. 2 para. 2(2) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(5)(a)**
- F154** Sch. 9 Pt. 2 para. 2(2)(a) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(5)(b)**
- F155** Word in Sch. 9 Pt. 2 para. 2(2)(b) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(5)(c)**
- F156** Sch. 9 Pt. 2 para. 2(3) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(6)**

### Specification of conditions of environmental permits and exercise of relevant functions

3.—(1) An environmental permit relating to a materials facility is subject to the condition that the operator of that facility must comply with paragraph 1(1) and (2) of this Part.

(2) Where the operator of a materials facility has given notification under paragraph 1(2) of this Part, an environmental permit relating to that facility is subject to the condition that the operator must comply with Chapter 2 of this Part for so long as that notification has not been withdrawn under paragraph 1(4) of this Part.

(3) The regulator must exercise its relevant functions in relation to a materials facility to ensure compliance with Chapter 2 of this Part.

(4) In the event of any inconsistency between the requirements imposed by virtue of Chapter 2 of this Part and any other condition contained in any environmental permit relating to a materials facility, the requirements imposed by Chapter 2 of this Part prevail.

## CHAPTER 2

### Measurement and reporting requirements for materials facilities

#### Input material

4.—(1) The operator of a materials facility must measure the total weight in tonnes of <sup>F140</sup>... waste material received at that facility, from each supplier, during each reporting period.

[<sup>F157</sup>(2) The operator of a materials facility must take samples of the waste material received at that facility, from each supplier, during each reporting period, except where that material is identified and kept apart as material which is to be transferred by the operator to another materials facility or person for the purpose of enabling it to be prepared for re-use or recycling, and measure the composition of those samples.]

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(3) For the purposes of sub-paragraph (2), one sample must be taken for every <sup>F158</sup>75 tonnes of <sup>F140</sup>... waste material received at the materials facility from each supplier.

(4) The total weight of all the samples taken for the purposes of sub-paragraph (3) must provide an average weight of 60kg or more per sample, and each sample taken must not weigh less than 55kg.

(5) For the purposes of sub-paragraph (2), measuring the composition of a sample taken means identifying the materials comprising that sample by reference to—

(a) the types of target material, non-target material and non-recyclable material that is contained in the sample,

<sup>F159</sup>(aa) subject to sub-paragraph (6A), the type of packaging that is contained in each type of target material, non-target material and non-recyclable material identified in that sample, including by reference to drink containers as a type of packaging,] and

(b) the weight in kilograms of each type of target material, non-target material and non-recyclable material <sup>F160</sup>and each type of packaging] that is so identified.

(6) <sup>F161</sup>The] material that is identified in a sample taken for the purposes of sub-paragraph (2) must, as a minimum, be separately identified by reference to the following <sup>F162</sup>...—

<sup>F163</sup>(a) glass;

(b) aluminium;

(c) steel;

(d) paper;

(e) card;

(f) plastic bottles;

(g) plastic pots, tubs and trays;

(h) film or other flexible plastic;

(i) other plastic (not falling within paragraphs (f) to (h));

(j) fibre-based composite material;]

<sup>F164</sup>(6A) Any glass that is identified in a sample taken for the purposes of sub-paragraph (2) must be separately identified and weighed as a type of packaging in accordance with sub-paragraph (5) (aa) only where the operator is given written notice by the regulator of the requirement to do so, and any such notice—

(a) must be given at least four weeks prior to the commencement of the reporting period in respect of which the measurements are to be taken, and

(b) must specify the minimum number of samples for each supplier in respect of which the measurements are required.]

(7) If the sample taken under sub-paragraph (2) contains material particles, they are deemed to comprise the proportions of <sup>F165</sup>the types of target materials, non-target materials, non-recyclable materials and packaging (including glass packaging where notice has been given under paragraph (6A))] already identified as making up the other contents of that sample, and the weight of the material particles must be apportioned according to those proportions for that particular sample.

<sup>F166</sup>(8) For the purposes of this paragraph, where a batch of waste material received at a materials facility comprises material from more than one supplier, and the proportion of that batch attributable to a particular supplier cannot reasonably be ascertained, an estimate of the proportion is sufficient.

(9) The operator of a materials facility must ensure that the composition of each sample taken for the purposes of this paragraph is representative of the materials comprising the waste material from which it is taken.]

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### Textual Amendments

- F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(2)**
- F157** Sch. 9 Pt. 2 para. 4(2) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(a)**
- F158** Word in Sch. 9 Pt. 2 para. 4(3) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(b)**
- F159** Sch. 9 Pt. 2 para. 4(5)(aa) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(c)(i)**
- F160** Words in Sch. 9 Pt. 2 para. 4(5)(b) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(c)(ii)**
- F161** Word in Sch. 9 Pt. 2 para. 4(6) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(d)(i)(aa)**
- F162** Word in Sch. 9 Pt. 2 para. 4(6) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(d)(i)(bb)**
- F163** Sch. 9 Pt. 2 para. 4(6)(a)-(j) substituted for Sch. 9 Pt. 2 para. 4(6)(a)-(d) (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(d)(ii)**
- F164** Sch. 9 Pt. 2 para. 4(6A) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(e)**
- F165** Words in Sch. 9 Pt. 2 para. 4(7) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(f)**
- F166** Sch. 9 Pt. 2 paras. 4(8)(9) substituted for Sch. 9 Pt. 2 para. 4(8) (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(7)(g)**

### Output material

5.—(1) Apart from the <sup>F140</sup>... waste material mentioned in sub-paragraph (2) and the specified output material mentioned in sub-paragraph (3), the operator of a materials facility must measure the total weight in tonnes of all other waste material that leaves the facility in each reporting period.

[<sup>F167</sup>(2) The operator of a materials facility must measure the total weight in tonnes of all waste material that leaves the facility in each reporting period that has been identified and kept apart as material to be transferred by the operator to another materials facility or person for the purpose of enabling that material to be prepared for re-use or recycling.]

(3) The operator of a materials facility must measure the total weight in tonnes of specified output material that leaves the facility in each reporting period.

(4) The operator of a materials facility must take samples of the specified output material produced at that facility in a reporting period and measure the composition of those samples.

(5) For the purpose of fulfilling the requirements in sub-paragraphs (3) and (4), the specified output material must, as a minimum, be identified by reference to the grade of glass, [<sup>F168</sup>paper, card, aluminium, steel, plastic or fibre-based composite] material making up each batch of specified output material.

(6) For the purpose of sub-paragraph (4), measuring the composition of a sample taken by the operator means identifying the materials comprising that sample, by reference to—

- (a) the type of target material, non-target material and non-recyclable material that is contained in the sample,

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- [<sup>F169</sup>(aa) subject to sub-paragraph (6A), the type of packaging that is contained in each type of target material, non-target material and non-recyclable material identified in that sample, including by reference to drink containers as a type of packaging,] and
- (b) the weight in kilograms of each type of target material, non-target material and non-recyclable material [<sup>F170</sup>and each type of packaging] that is so identified.

[<sup>F171</sup>(6A) Any glass that is identified in measuring the composition of a sample for the purpose of sub-paragraph (4) must be separately identified and weighed as a type of packaging in accordance with sub-paragraph (6)(aa) only where the operator is given written notice by the regulator of the requirement to do so, and any such notice—

- (a) must be given at least four weeks prior to the commencement of the reporting period in respect of which the measurements are to be taken, and
- (b) must specify the minimum number of samples for each supplier in respect of which the measurements are required.]

(7) [<sup>F172</sup>Subject to sub-paragraph (7A)] the samples mentioned in sub-paragraph (4) must be taken at a minimum frequency of once per the amount in tonnes that is specified in the second column of the following table, in relation to the type of <sup>F173</sup>... material that is mentioned in the first column—

<sup>F173</sup> ... <b>Material</b>	<b>Amount</b>
Glass	50 tonnes
Paper	60 tonnes
[ <sup>F174</sup> Card	60 tonnes]
Metal [ <sup>F175</sup> (comprising aluminium, steel or both)]	20 tonnes
Plastic	15 tonnes
[ <sup>F176</sup> Fibre-based composite material	60 tonnes]

[<sup>F177</sup>(7A) Where a sample contains more than one type of material, the applicable minimum frequency is to be determined by reference to the lowest figure in the second column of the table that is specified in relation to a material contained in the sample.]

[<sup>F178</sup>(8) The minimum weight of any sample taken for the purposes of sub-paragraph (4) is—

- (a) 10kg in relation to glass,
- (b) 50kg in relation to paper,
- (c) 50kg in relation to card,
- (d) 10kg in relation to metal (comprising aluminium, steel or both),
- (e) 20kg in relation to plastic, and
- (f) 50kg in relation to fibre-based composite material,

and for these purposes any sample that contains more than one type of material is to be treated as though it comprised only the material to which the lowest sampling frequency applies as determined under sub-paragraph (7A).]

(9) For the purposes of sub-paragraph (5), the grade of a material means a description of that kind of material by reference to its particular material specification.

(10) If the sample taken under sub-paragraph (4) contains material particles, they are deemed to comprise the proportions of [<sup>F179</sup>the types of target materials, non-target materials, non-recyclable

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materials and packaging (including glass packaging where notice has been given under subparagraph (6A))] already identified as making up the other contents of that sample, and the weight of the material particles must be apportioned according to those proportions for that particular sample.

[<sup>F180</sup>(11) The operator of a materials facility must ensure that the composition of each sample taken for the purposes of this paragraph is representative of the materials comprising the batch of specified output material from which it is taken.]

#### Textual Amendments

- F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(2)**
- F167** Sch. 9 Pt. 2 para. 5(2) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(a)**
- F168** Words in Sch. 9 Pt. 2 para. 5(5) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(b)**
- F169** Sch. 9 Pt. 2 para. 5(6)(aa) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(c)(i)**
- F170** Words in Sch. 9 Pt. 2 para. 5(6)(b) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(c)(ii)**
- F171** Sch. 9 Pt. 2 para. 5(6A) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(d)**
- F172** Words in Sch. 9 Pt. 2 para. 5(7) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(e)(i)**
- F173** Word in Sch. 9 Pt. 2 para. 5(7) omitted (1.10.2024) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(e)(ii)**
- F174** Words in Sch. 9 Pt. 2 para. 5(7) Table inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(e)(iii)**
- F175** Words in Sch. 9 Pt. 2 para. 5(7) Table inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(e)(iv)**
- F176** Words in Sch. 9 Pt. 2 para. 5(7) Table inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(e)(v)**
- F177** Sch. 9 Pt. 2 para. 5(7A) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(f)**
- F178** Sch. 9 Pt. 2 para. 5(8) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(g)**
- F179** Words in Sch. 9 Pt. 2 para. 5(10) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(h)**
- F180** Sch. 9 Pt. 2 para. 5(11) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(8)(i)**

#### Records

6.—(1) The operator of a materials facility must record the following information [<sup>F181</sup>obtained for the purposes of paragraphs 4 and 5]—

- (a) the measurements taken under paragraph 4(1) [<sup>F182</sup>and, for each batch of material of which the total weight is comprised—
- (i) the date the batch was received, and
  - (ii) the name and address of the supplier (or of each supplier) for the batch concerned];

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- [<sup>F183</sup>(b) details of all the samples and measurements taken for the purposes of paragraph 4(2) including the weight in kilograms of each sample and its composition and the date the sample was taken;]
- [<sup>F184</sup>(ba) details of the methodology used in each case to ensure that the composition of the sample is representative for the purposes of paragraph 4(9);]
- (c) the measurements taken under paragraph 5(1) and details of where the other waste material that leaves the facility in each reporting period is sent [<sup>F185</sup>and of the date it is sent];
- (d) the measurements taken under paragraph 5(2) and details of where the <sup>F140</sup>... waste material that leaves the facility in each reporting period is sent [<sup>F186</sup>and of the date it is sent];
- (e) the measurements taken under paragraph 5(3) and details of where the specified output material that leaves the facility in each reporting period is sent [<sup>F187</sup>and of the date it is sent];
- [<sup>F188</sup>(f) details of all the samples and measurements taken for the purposes of paragraph 5(4) including the weight in kilograms of each sample and its composition, the date the sample was taken and any other details identifying the batch of specified output material from which it was taken;]
- (g) details of the amount in tonnes of specified output material that is produced by the materials facility in a reporting period, by reference to the grade of glass, [<sup>F189</sup>aluminium, steel], paper [<sup>F190</sup>, card] and plastic <sup>F191</sup>... material that makes up that batch of material;
- [<sup>F192</sup>(h) details of the methodology used in each case to ensure that the composition of the sample is representative for the purposes of paragraph 5(11).]
- (2) The information recorded under sub-paragraph (1) must—
- (a) be retained by the operator of a materials facility for a minimum of 4 years from the date that it is first recorded [<sup>F193</sup>in the case of information recorded before 1st October 2024 and for a minimum of 7 years from the date that it is first recorded in the case of information recorded on or after 1st October 2024], and
- (b) be produced for inspection by the regulator if required during [<sup>F194</sup>the period in which the information concerned is required to be retained].

### Textual Amendments

- F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(2)**
- F181** Words in Sch. 9 Pt. 2 para. 6(1) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(a)**
- F182** Words in Sch. 9 Pt. 2 para. 6(1)(a) and Sch. 9 Pt. 2 para. 6(1)(a)(i)(ii) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(b)**
- F183** Sch. 9 Pt. 2 para. 6(1)(b) substituted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(c)**
- F184** Sch. 9 Pt. 2 para. 6(1)(ba) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(d)**
- F185** Words in Sch. 9 Pt. 2 para. 6(1)(c) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(e)**
- F186** Words in Sch. 9 Pt. 2 para. 6(1)(d) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(e)**
- F187** Words in Sch. 9 Pt. 2 para. 6(1)(e) inserted (1.10.2024) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2023 \(S.I. 2023/1156\)](#), regs. 1(2), **2(9)(e)**



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- F188** Sch. 9 Pt. 2 para. 6(1)(f) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(9)(f)**
- F189** Words in Sch. 9 Pt. 2 para. 6(1)(g) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(9)(g)(i)**
- F190** Word in Sch. 9 Pt. 2 para. 6(1)(g) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(9)(g)(ii)**
- F191** Word in Sch. 9 Pt. 2 para. 6(1)(g) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(9)(g)(iii)**
- F192** Sch. 9 Pt. 2 para. 6(1)(h) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(9)(h)**
- F193** Words in Sch. 9 Pt. 2 para. 6(2)(a) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(10)(a)**
- F194** Words in Sch. 9 Pt. 2 para. 6(2)(b) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(10)(b)**

### Reports to the regulator

7.—(1) The operator of a materials facility must provide a report to the regulator that includes the information set out in sub-paragraphs (3) and (4).

(2) The report mentioned in sub-paragraph (1) must be—

- (a) produced in electronic format [<sup>F195</sup>and in the form specified by the regulator], and
- (b) submitted to the regulator in respect of a reporting period within 1 month of the expiry of that period.

(3) The following information must be provided for all <sup>F140</sup>... waste material that is received by the materials facility during a reporting period—

- (a) the measurements taken under paragraph 4(1) [<sup>F196</sup>and the details for each batch of material recorded in accordance with paragraph 6(1)(a)];
- (b) the total number of all samples taken for each supplier under paragraph 4(2);
- (c) the total weight in kilograms of all the samples taken for each supplier under paragraph 4(2) [<sup>F197</sup>and the details for those samples as recorded in accordance with paragraph 6(1)(b)];

<sup>F198</sup>(d) .....

<sup>F198</sup>(e) .....

<sup>F198</sup>(f) .....

(4) The following information must be provided in respect of <sup>F199</sup>... material that leaves the materials facility during a reporting period—

- (a) the measurements taken under paragraph 5(1) and details of where the other waste material is sent [<sup>F200</sup>recorded in accordance with paragraph 6(1)(c)];
- (b) the measurements taken under paragraph 5(2) and details of where the <sup>F140</sup>... waste material is sent [<sup>F201</sup>recorded in accordance with paragraph 6(1)(d)];
- (c) the measurements taken under paragraph 5(3) [<sup>F202</sup>and details of where the specified output material is sent recorded in accordance with paragraph 6(1)(e)];
- (d) the total number of all samples taken under paragraph 5(4);
- (e) the total weight in kilograms of all the samples that are taken under paragraph 5(4) [<sup>F203</sup>, with the details for those samples recorded in accordance with paragraph 6(1)(f)];

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- F204(f) .....
- F204(g) .....
- F204(h) .....
- F205(5) .....

**Textual Amendments**

- F140** Word in Sch. 9 Pt. 2 omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(2)**
- F195** Words in Sch. 9 Pt. 2 para. 7(2)(a) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(a)**
- F196** Words in Sch. 9 Pt. 2 para. 7(3)(a) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(b)(i)**
- F197** Words in Sch. 9 Pt. 2 para. 7(3)(c) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(b)(ii)**
- F198** Sch. 9 Pt. 2 para. 7(3)(d)-(f) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(b)(iii)**
- F199** Words in Sch. 9 Pt. 2 para. 7(4) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(i)**
- F200** Words in Sch. 9 Pt. 2 para. 7(4)(a) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(ii)**
- F201** Words in Sch. 9 Pt. 2 para. 7(4)(b) substituted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(iii)**
- F202** Words in Sch. 9 Pt. 2 para. 7(4)(c) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(iv)**
- F203** Words in Sch. 9 Pt. 2 para. 7(4)(e) inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(v)**
- F204** Sch. 9 Pt. 2 para. 7(4)(f)-(h) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(c)(vi)**
- F205** Sch. 9 Pt. 2 para. 7(5) omitted (1.10.2024) by virtue of The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(11)(d)**

[<sup>F206</sup>**Disclosure of information by the regulator**

**8.** The regulator may share any information obtained from the operator of a materials facility under this Part with—

- (a) a person who is appointed, by virtue of regulations made under Part 1 of Schedule 5 to the Environment Act 2021, as an administrator of a scheme for producer responsibility for disposal costs (“the administrator”), and
- (b) any other person who is exercising functions on that administrator’s behalf,

for the purpose of enabling the exercise of functions conferred on the administrator under those regulations.]

**Textual Amendments**

- F206** Sch. 9 Pt. 2 para. 8 inserted (1.10.2024) by The Environmental Permitting (England and Wales) (Amendment) Regulations 2023 (S.I. 2023/1156), regs. 1(2), **2(12)**

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## [<sup>F207</sup>PART 3

### Waste operations: management and technical competence conditions

#### Textual Amendments

**F207** Sch. 9 Pt. 3 inserted (7.4.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(2), 4(5)

#### Written management system conditions

1.—(1) An environmental permit which meets each of the following criteria is subject to conditions A and B—

- (a) the permit was granted before 6th April 2008;
- (b) the permit does not authorise a waste operation carried on at an installation or by means of a Part B mobile plant; and
- (c) the permit does not, immediately before 7th April 2019, contain a condition referring to a management system recorded in writing relating to risks relating to pollution.

(2) Condition A is that the operator must manage and operate the waste operation in accordance with a system (a “written management system”), described in a document or documents, which identifies and minimises the risks of pollution arising from the waste operation, including (but not limited to) those—

- (a) arising from operations (including maintenance);
- (b) arising from an accident or other incident;
- (c) arising from a failure to comply with or from a contravention of the environmental permit in question;
- (d) identified following a complaint; or
- (e) arising from the closure of the operation.

(3) Condition B is that the operator must—

- (a) from time to time, review the written management system and keep it up to date; and
- (b) keep a written record of—
  - (i) activities carried out in accordance with the written management system; and
  - (ii) any review or update under paragraph (a).

(4) If the regulator varies an environmental permit which meets the criteria in paragraph (1) so as to include a condition referring to a management system recorded in writing relating to risks relating to pollution, this paragraph ceases to apply to that environmental permit.

#### Technical competence: notification condition

2.—(1) An environmental permit is subject to the condition in sub-paragraph (6) if it meets one or both of the following criteria.

(2) The first criterion is that the permit authorises a waste operation which is not carried on at an installation or by means of a Part B mobile plant.

(3) The second criterion is that the permit authorises a specified waste management activity.

(4) Each of the following activities is a specified waste management activity—

- (a) the disposal of waste in a landfill falling within Section 5.2 of Part 2 of Schedule 1;

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (b) the disposal of hazardous waste falling within Section 5.3 of Part 2 of Schedule 1;
  - (c) the recovery of hazardous waste falling within Part A(1)(a)(i), (ii), (iii), (iv), (v), (viii) or (x) of Section 5.3 of Part 2 of Schedule 1;
  - (d) the disposal of non-hazardous waste falling within Part A(1)(a) of Section 5.4 of Part 2 of Schedule 1;
  - (e) the recovery or a mix of recovery and disposal of non-hazardous waste falling within of Part A(1)(b) of Section 5.4 of Part 2 of Schedule 1;
  - (f) the temporary or underground storage of hazardous waste falling within Section 5.6 of Part 2 of Schedule 1.
- (5) But an activity falling within sub-paragraph (4)(b) to (f) is not a specified waste management activity if that activity—
- (a) is carried on at the same installation as a Part A(1) activity not mentioned in sub-paragraph (4); and
  - (b) is not the activity which constitutes the primary purpose for operating the installation.
- (6) The condition is that the operator must periodically give to the regulator—
- (a) information demonstrating the operator’s compliance with one of the following standards during the relevant period; or
  - (b) if the operator did not comply with one of the following standards during the relevant period, information to that effect.
- (7) The first standard is the CIWM/WAMITAB Operator Competence Scheme, Version 9, September 2018, published by WAMITAB.
- (8) The second standard is the Competence Management System: Requirements, Version 4, April 2015, published by Energy and Utility Skills.
- (9) In sub-paragraph (6)—
- (a) the reference to giving information periodically is a reference to giving information in each quarterly or annual return (as the case may be) for giving information about waste acceptance or removal in accordance with the environmental permit in question;
  - (b) “relevant period” means—
    - (i) in relation to the first period, the period beginning with 7th April 2019 and ending with the end of the period to which the first return relates;
    - (ii) in relation to each subsequent period, the quarter or year (as the case may be) to which the return relates.
- (10) The regulator may amend the form for giving information about waste acceptance or removal in accordance with an environmental permit so as to enable information to be given in accordance with this paragraph.]

## [<sup>F208</sup>Part 4

Waste separately collected for preparing for re-use and recycling not to be incinerated

### Textual Amendments

**F208** Sch. 9 Pt. 4 inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(5)**

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

1.—(1) Every environmental permit which authorises a small waste incineration plant, a waste co-incineration plant, or a waste incineration plant is deemed to contain the following condition, unless such a condition to the same effect is included in the permit.

(2) The condition is that the operator must not accept—

- (a) [<sup>F209</sup>any waste paper, metal, plastic or glass][<sup>F209</sup>in Wales, any waste paper, card, cartons, metal, plastic, glass, food, small electrical and electronic equipment or unsold textiles] for incineration if that waste has been separately collected for the purpose of preparing for re-use or recycling; or
- (b) any waste for incineration that results from the treatment of waste referred to in paragraph (a), unless—
  - (i) the relevant permit authorises the operator to accept that type of waste for incineration; and
  - (ii) incineration of that waste delivers the best environmental outcome in accordance with regulation 12 of the Waste (England and Wales) Regulations 2011.

[<sup>F210</sup>(3) For the purposes of this paragraph—

“cartons” means fibre-based composite packaging, being packaging material which is made of paperboard or paper fibres, laminated with low density polythene or polypropylene plastic, and which may also have layers of other materials, to form a single unit that cannot be separated by hand;

“electrical and electronic equipment” means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1,000 volts for alternating current and 1,500 volts for direct current;

“small electrical and electronic equipment” means electrical and electronic equipment falling within one of the categories of EEE listed in Schedule 3 to the Waste Electrical and Electronic Equipment Regulations 2013, excluding items with any external dimension of more than 50 centimetres;

“unsold” means an unused consumer product, in a factory, retail premises, wholesaler, warehouse or other premises, that has not been sold to a consumer or has been sold and returned by a consumer.]]

#### Textual Amendments

**F209** Words in Sch. 9 Pt. 4 para. 1(2)(a) substituted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023 \(S.I. 2023/1289\)](#), regs. 1(2), **4(2)(a)**

**F210** Sch. 9 Pt. 4 para. 1(3) inserted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023 \(S.I. 2023/1289\)](#), regs. 1(2), **4(2)(b)**

## SCHEDULE 10

Regulation 35(1)

### Landfill

#### Application

1. This Schedule applies in relation to every landfill except a landfill which finally ceased to accept waste for disposal before 16th July 2001.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Interpretation: general**

2.—(1) In this Schedule—

- (a) unless otherwise provided, an expression that is defined in the Landfill Directive has the meaning given in that Directive,
- (b) “the Decision” means Council Decision [2003/33/EC](#)<sup>M107</sup>,
- (c) “the Decision Annex” means the Annex to the Decision, and
- (d) “landfill” has the meaning given in Article 2(g) of the Landfill Directive, but does not include any operation excluded from the scope of that Directive by Article 3(2) [<sup>F211</sup>or (3)].

(2) When interpreting <sup>F212</sup>... the Decision for the purposes of this Schedule—

- (a) an expression that is defined in Part 1 of these Regulations has the meaning given in that Part,

<sup>F213</sup>(b) .....

<sup>F213</sup>(c) .....

- (d) “PAHs (polycyclic aromatic hydrocarbons)” means Naphthalene, Acenaphthylene, Acenaphthene, Anthracene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)perylene, Benzo(a)pyrene, Chrysene, Coronene, Dibenz(a,h)anthracene, Fluorene, Fluoranthene, Indeno(1,2,3-c,d)pyrene, Phenanthrene and Pyrene,
- (e) “permit” means environmental permit,
- (f) “SIC code” means the UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007) published by the Office for National Statistics on 14th December 2007 and implemented on 1st January 2008 <sup>M108</sup>, and
- (g) the competent authority is the regulator.

**Textual Amendments**

**F211** Words in Sch. 10 para. 2(1)(d) inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(6)(a)**

**F212** Words in Sch. 10 para. 2(2) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(14)(a)(i)**; 2020 c. 1, Sch. 5 para. 1(1)

**F213** Sch. 10 para. 2(2)(b)(c) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(14)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

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**Marginal Citations**

**M107** OJ No L 11, 16.1.2003, p 27.

**M108** See <http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/standard-industrial-classification/index.html>. A copy may be obtained from the Waste Regulation Team, the Department for Environment, Food and Rural Affairs, Area 2B, Nobel House, 17 Smith Square, London SW1P 3JR.

**Applications for the grant of an environmental permit**

3. The regulator must require that every application for the grant of an environmental permit includes the information specified in Article 7 of the Landfill Directive.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Inspection prior to operation

4. The regulator must inspect every landfill site so as to comply with the requirements in Article 8(c) of the Landfill Directive.

### Exercise of relevant functions

5.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Landfill Directive—

- (a) Article 4;
- (b) Article 5(3) and (4);
- (c) Article 6;
- (d) Article 8, but not in respect of nuisances and hazards arising from traffic beyond the site of a landfill;
- (e) Article 9;
- (f) Article 10;
- (g) Article 11(1);
- (h) Article 12;
- (i) Article 13;
- (j) Article 14.

(2) The regulator must exercise those relevant functions having regard to Article 1 of the Landfill Directive.

(3) The regulator must exercise those relevant functions so as to ensure compliance with the requirements imposed <sup>F214</sup>... by the following provisions of the Decision—

- (a) Article 2;
- (b) Article 3;
- (c) Article 4.

(4) The regulator may exercise those relevant functions so as to permit the storage of metallic mercury in accordance with [<sup>F215</sup>Regulation (EU) 2017/852 of the European Parliament and of the Council on mercury].

<sup>F216</sup>(5) .....

#### Textual Amendments

**F214** Words in Sch. 10 para. 5(3) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(14)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

**F215** Words in Sch. 10 para. 5(4) substituted (E.) (1.6.2018) by The Environment, Food and Rural Affairs (Miscellaneous Amendments) (England) Regulations 2018 (S.I. 2018/575), art. 1(2), **reg. 12(3)(a)** and words in Sch. 10 para. 5(4) substituted (W.) (17.12.2018) by The Environment, Planning and Rural Affairs (Miscellaneous Amendments) (Wales) Regulations 2018 (S.I. 2018/1216), regs. 1(3), **14(a)**

**F216** Sch. 10 para. 5(5) omitted (E.) (1.6.2018) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments) (England) Regulations 2018 (S.I. 2018/575), art. 1(2), **reg. 12(3)(b)** and Sch. 10 para. 5(5) omitted (W.) (17.12.2018) by virtue of The Environment, Planning and Rural Affairs (Miscellaneous Amendments) (Wales) Regulations 2018 (S.I. 2018/1216), regs. 1(3), **14(b)**

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**[<sup>F217</sup>Waste separately collected for preparing for re-use and recycling not to be landfilled**

**5A.**—(1) Every environmental permit which authorises a landfill is deemed to contain the following condition, unless such a condition to the same effect is included in the permit.

(2) The condition is that the operator must not accept—

(a) [<sup>F218</sup>any waste paper, metal, plastic or glass for landfill if that waste has been separately collected for the purpose of preparing for re-use or recycling; or]<sup>F218</sup>in Wales, any waste paper, card, cartons, metal, plastic, glass, food, small electrical and electronic equipment or textiles for landfill if that waste has been separately collected for the purposes of preparing for re-use or recycling;]

[ any waste wood; or]  
<sup>F219</sup>(aa)

(b) [<sup>F220</sup>any waste for landfill that results from the treatment of waste referred to in paragraph (a), unless]<sup>F220</sup>in Wales, any waste for landfill that results from the treatment of waste referred to in paragraph (a) or (aa) unless]—

(i) the relevant permit authorises the operator to accept that type of waste for landfill; and

(ii) landfill of that waste delivers the best environmental outcome in accordance with regulation 12 of the Waste (England and Wales) Regulations 2011.

[  
<sup>F221</sup>(3) For the purposes of this paragraph—

“cartons” means fibre-based composite packaging, being packaging material which is made of paperboard or paper fibres, laminated with low density polythene or polypropylene plastic, and which may also have layers of other materials, to form a single unit that cannot be separated by hand;

“electrical and electronic equipment” means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1,000 volts for alternating current and 1,500 volts for direct current;

“small electrical and electronic equipment” means electrical and electronic equipment falling within one of the categories of EEE listed in Schedule 3 to the Waste Electrical and Electronic Equipment Regulations 2013, excluding items with any external dimension of more than 50 centimetres.]]

**Textual Amendments**

**F217** Sch. 10 para. 5A inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020](#) (S.I. 2020/904), regs. 1(1), **21(6)(b)**

**F218** Words in Sch. 10 para. 5A(2)(a) substituted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023](#) (S.I. 2023/1289), regs. 1(2), **4(3)(a)**

**F219** Sch. 10 para. 5A(2)(aa) inserted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023](#) (S.I. 2023/1289), regs. 1(2), **4(3)(b)**

**F220** Words in Sch. 10 para. 5A(2)(b) substituted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023](#) (S.I. 2023/1289), regs. 1(2), **4(3)(c)**

**F221** Sch. 10 para. 5A(3) inserted (W.) (6.4.2024) by [The Prohibition on the Incineration, or the Deposit in Landfill, of Specified Waste \(Wales\) Regulations 2023](#) (S.I. 2023/1289), regs. 1(2), **4(3)(d)**



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## Interpretation of the Landfill Directive for the exercise of relevant functions

<sup>F222</sup>6. ....

### Textual Amendments

**F222** Sch. 10 para. 6 omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(14)(c)**; 2020 c. 1, Sch. 5 para. 1(1)

## Interpretation of the Decision Annex for the exercise of relevant functions: general

7. When interpreting the Decision Annex for the purposes of paragraph 5(3)—
- (a) in points 1.1.1 and 1.2, the periods referred to as to be defined or determined by the [<sup>F223</sup>appropriate authority] are in each case 2 years,
  - (b) point 1.1.2(b) is to be read as requiring the SIC code of the process producing the waste to be part of the information referred to,
  - (c) in point 1.1.2(g), ignore the words “in case of mirror entries”,
  - (d) ignore the third sentence of section 2,
  - (e) in points 2.1.2.1, 2.2.2, 2.3.1 and 2.4.1 the table columns headed “L/S = 10 l/kg” must be used to determine limit values,
  - (f) in the table in point 2.1.2.2, the limit value for PAHs (polycyclic aromatic hydrocarbons) is set at 100mg/kg,
  - (g) in point 2.2.3, the first reference to “gypsum-based materials” is to be read as “gypsum-based and other high sulphate-bearing materials”,
  - (h) in point 2.3.3, the first reference to “suitable asbestos waste” is to be read as “suitable materials”, and
  - (i) in the table in point 2.4.1, the limit values are subject to the qualification that the regulator may include conditions in an environmental permit authorising limit values for specific parameters (other than Dissolved Organic Carbon) up to 3 times higher than those listed for specified wastes accepted at a landfill, taking into account the characteristics of the landfill and its surroundings and provided a risk assessment demonstrates that emissions (including leachate) from the landfill will present no additional risk to the environment.

### Textual Amendments

**F223** Words in Sch. 10 para. 7(a) substituted (31.12.2020) by [The Waste \(Miscellaneous Amendments\) \(EU Exit\) Regulations 2019 \(S.I. 2019/620\)](#), regs. 1(2)(b), **22(2)**; 2020 c. 1, Sch. 5 para. 1(1)

## Interpretation of the Decision Annex for the exercise of relevant functions: additional acceptance criteria relating to physical stability and bearing capacity of granular waste

8. When interpreting the Decision Annex for the purposes of paragraph 5(3)—
- (a) in point 2.3.2, the criteria to ensure that granular waste will have sufficient physical stability and bearing capacity are that it has either—
    - (i) if it is cohesive waste, a mean in situ shear strength of at least 50kPa, or
    - (ii) if it is non-cohesive waste, an in situ bearing ratio of at least 5%;

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (b) point 2.4.2 is to be read as if, in addition to the criteria listed, it requires the satisfaction of the criteria in paragraph (a)(i) and (a)(ii).

**Interpretation of the Decision Annex for the exercise of relevant functions: additional acceptance criteria in relating to monolithic waste**

9. When interpreting the Decision Annex for the purposes of paragraph 5(3)—
- (a) point 2.3.1 is to be read as if, in addition to the criteria listed, it requires the satisfaction of the following criteria in relation to stable, non-reactive monolithic hazardous waste and non-hazardous waste which is to be landfilled in the same cell with such waste—
- (i) it meets either—
- (aa) the limit values for leaching set out in the table in point 2.3.1, or
- (bb) the limit values for leaching set out in the following table—
- (ii) it meets the additional criteria set out in the following table—

<i>Parameter</i>	<i>Value</i>
pH of the eluate from the monolith or crushed monolith	Must be evaluated
Electrical conductivity ( $\mu$ S.cm-1m-2) of the eluate from the monolith or crushed monolith	Must be evaluated
Acid Neutralisation Capacity (ANC) of the crushed monolith	Must be evaluated

- (iii) it has a mean unconfined compressive strength of at least 1Mpa after 28 days' curing,
- (iv) it has either—
- (aa) dimensions of greater than 40cm along each side, or
- (bb) a depth and fracture spacing when hardened of greater than 40cm, and
- (v) where the waste was subjected to treatment to render it monolithic, prior to such treatment it met the following limit value—
- (aa) loss on ignition of 10%, or
- (bb) total organic carbon of 6%;
- (b) point 2.4.1 in the Decision Annex is to be read as if, in addition to the criteria listed, it requires the satisfaction of the following criteria in relation to monolithic waste to be accepted at a landfill for hazardous waste—
- (i) it complies with paragraphs (a)(ii) to (a)(v), and
- (ii) it meets either—
- (aa) the limit values for leaching set out in the table in point 2.4.1, or
- (bb) the limit values for leaching set out in the following table—

**Closure of a landfill**

10.—(1) The regulator must set out any reasoned decision under Article 13(a)(iii) of the Landfill Directive in a closure notice served on the operator.

(2) A closure notice must, in addition to stating the regulator's reasons for requiring initiation of the closure procedure, specify—

- (a) the steps the operator is required to take to initiate the procedure, and
- (b) the period within which they must be taken.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(3) The regulator may withdraw a closure notice at any time by further notice served on the operator.

(4) Closure of a landfill does not relieve the operator of liability under the conditions of the environmental permit.

**Surrender applications**

**11.** When determining an application for the surrender, in whole or in part, of an environmental permit, the regulator must exercise its functions so as to ensure the operator complies with the requirements in Article 13(d) of the Landfill Directive.

SCHEDULE 11

Regulation 35(1)

Waste motor vehicles

**Application**

1. This Schedule applies in relation to waste motor vehicles.

**Interpretation**

2.—(1) In this Schedule—

“waste” means waste within the meaning of Article 3(1) of the Waste Framework Directive<sup>F224</sup>, as read with Articles 5 and 6 of that Directive;

“waste motor vehicle” means a motor vehicle that is waste.

<sup>F225</sup>(2) .....

**Textual Amendments**  
**F224** Words in Sch. 11 para. 2(1) inserted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(15)(a)(i)**; 2020 c. 1, Sch. 5 para. 1(1)  
**F225** Sch. 11 para. 2(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(15)(a)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of relevant functions**

3.—(1) The regulator must exercise its relevant functions so as to ensure compliance with Article 6(1) and (3) of the End-of-Life Vehicles Directive.

<sup>F226</sup>(2) .....

**Textual Amendments**  
**F226** Sch. 11 para. 3(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(15)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

SCHEDULE 12

Regulation 35(1)

Waste electrical and electronic equipment

**Application**

1. This Schedule applies in relation to WEEE which is within the scope of the WEEE Directive by virtue of Article 2 of that Directive.

**Interpretation**

<sup>F227</sup>2. ....

**Textual Amendments**  
**F227** Sch. 12 para. 2 omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(16)**; 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of relevant functions**

3.—(1) The regulator must exercise its relevant functions so as to ensure compliance with Articles 8(1) to (3) and 9(3) of the WEEE Directive.

<sup>F228</sup>(2) ....

**Textual Amendments**  
**F228** Sch. 12 para. 3(2) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(16)**; 2020 c. 1, Sch. 5 para. 1(1)

SCHEDULE 13

Regulation 35(1)

Waste incineration: Industrial Emissions Directive

**Application**

1. This Schedule applies in relation to—  
(a) every small waste incineration plant, and  
(b) every waste incineration plant or waste co-incineration plant,

to which Chapter IV of the Industrial Emissions Directive applies, except those which are operated as a domestic activity in connection with a private dwelling.

**Interpretation**

<sup>F229</sup>2. ....

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Textual Amendments**

**F229** Sch. 13 para. 2 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(17)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

**Applications for the grant of an environmental permit**

**3.** The regulator must ensure that every application for the grant of an environmental permit includes the information specified in Article 44 of the Industrial Emissions Directive.

**Exercise of relevant functions**

**4.—(1)** The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive—

- (a) Article 5(1) and (3);
- (b) Article 7;
- (c) Article 8(2);
- (d) Article 9;
- (e) Article 42(1)
- (f) Article 43;
- (g) Article 45(1), (2) and (4);
- (h) Article 46;
- (i) Article 47;
- (j) Article 48(1) to (4);
- (k) Article 49;
- (l) Article 50;
- <sup>F230</sup>(m) Article 51;
- (n) Article 52;
- (o) Article 53;
- (p) Article 54;
- (q) Article 55;
- (r) Article 82(5) and (6).

<sup>F231</sup>(2) .....

**Textual Amendments**

**F230** Sch. 13 para. 4(1)(m) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(17)(b)(i)(bb)** (as amended by S.I. 2019/559, regs. 1(2), 3(2)(b)(i)); 2020 c. 1, Sch. 5 para. 1(1)

**F231** Sch. 13 para. 4(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(17)(c)**; 2020 c. 1, Sch. 5 para. 1(1)

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SCHEDULE 14

Regulation 35(1)

Solvent emission activities

**Application**

1. This Schedule applies in relation to every solvent emission activity, but it does not apply to installations used solely for research activities, development activities or the testing of new products or processes.

**Interpretation**

<sup>F232</sup>2. ....

**Textual Amendments**  
F232 Sch. 14 para. 2 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(18)(a); 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of relevant functions**

3. The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive—

- (a) Article 5(1) and (3);
- (b) Article 7;
- (c) Article 8(2);
- (d) Article 9;
- (e) Article 57;
- (f) Article 58;
- (g) Article 59 <sup>F233</sup> ...;
- (h) Article 60;
- (i) Article 61;
- (j) Article 62;
- (k) Article 63;
- (l) Article 65;
- (m) Article 82(7), (8) and (9).

**Textual Amendments**  
F233 Words in Sch. 14 para. 3(g) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(18)(b)(ii); 2020 c. 1, Sch. 5 para. 1(1)

## SCHEDULE 15

Regulation 35(1)

### Large combustion plants: Industrial Emissions Directive

#### Application

1. This Schedule applies in relation to every large combustion plant.

#### Interpretation

- 2.—(1) In this Schedule—

F234

“large combustion plant” means a combustion plant with a total rated thermal input of 50 or more megawatts to which Chapter III of the Industrial Emissions Directive applies.

F235

- (2) .....

#### Textual Amendments

**F234** Words in Sch. 15 para. 2(1) omitted (30.1.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **14**

**F235** Sch. 15 para. 2(2) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(19)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Exercise of relevant functions

3. The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive—

- (a) Article 29;
- (b) Article 30(1) to (8)<sup>F236</sup> ...;
- (c) Article 31(1) and (2);
- (d) Article 32(2) and (3);
- (e) Article 33<sup>F237</sup> ...;
- (f) Article 34(1) and (2);
- (g) Article 35(1);
- (h) Article 37;
- (i) Article 38;
- (j) Article 39;
- (k) Article 40.

#### Textual Amendments

**F236** Words in Sch. 15 para. 3(b) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(19)(b)(i)**; 2020 c. 1, Sch. 5 para. 1(1)

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**F237** Words in Sch. 15 para. 3(e) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(19)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)

**Interruption in supply of fuel**

- 4. The regulator must—
  - (a) immediately inform the appropriate authority of any derogation under Article 30(5) of the Industrial Emissions Directive;
  - (b) immediately inform the appropriate authority if it considers that a derogation in accordance with Articles 30(6) or 37(2) of the Industrial Emissions Directive is or might be appropriate.

SCHEDULE 16

Regulation 35(1)

Asbestos

**Application**

- 1. This Schedule applies in relation to every regulated facility.

**Interpretation**

<sup>F238</sup> 2. ....

**Textual Amendments**  
**F238** Sch. 16 para. 2 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(20)**; 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of relevant functions**

3.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Asbestos Directive—

- (a) Article 3;
- (b) Article 4(1);
- (c) Article 5;
- (d) Article 6(1) and (2);
- (e) Article 8.

<sup>F239</sup>(2) .....

**Textual Amendments**  
**F239** Sch. 16 para. 3(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(20)**; 2020 c. 1, Sch. 5 para. 1(1)



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SCHEDULE 17

Regulation 35(1)

Titanium dioxide: Industrial Emissions Directive

**Application**

- 1. This Schedule applies in relation to every installation in which titanium dioxide is produced.

**Interpretation**

<sup>F240</sup>2. ....

**Textual Amendments**  
**F240** Sch. 17 para. 2 omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(21); 2020 c. 1, Sch. 5 para. 1(1)

**Exercise of relevant functions**

- 3. The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Industrial Emissions Directive—
  - (a) Article 67;
  - (b) Article 68;
  - (c) Article 69;
  - (d) Article 70.

SCHEDULE 18

Regulation 35(1)

Petrol vapour recovery

**PART 1**

**PVR I**

**Application**

- 1. This Part applies in relation to every Part B activity falling within paragraphs (b) and (c) of Part B of Section 1.2 of Part 2 of Schedule 1.

**Exercise of relevant functions**

- 2.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of PVR I—
  - (a) Article 3(1), first paragraph;
  - (b) Article 4(1), first and last paragraphs, and 4(3);
  - (c) Article 6(1), first paragraph.

<sup>F241</sup>(2) ....

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Textual Amendments**

**F241** Sch. 18 Pt. 1 para. 2(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(22); 2020 c. 1, Sch. 5 para. 1(1)

**PART 2**

**PVR II**

**Application**

1. This Part applies in relation to every Part B activity falling within paragraphs (d) to (f) of Part B of Section 1.2 of Part 2 of Schedule 1.

**Exercise of relevant functions**

2.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of PVR II—

- (a) Article 3;
- (b) Article 4;
- (c) Article 5.

<sup>F242</sup>(2) .....

**Textual Amendments**

**F242** Sch. 18 Pt. 2 para. 2(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(22); 2020 c. 1, Sch. 5 para. 1(1)

SCHEDULE 19

Regulation 35(1)

Waste batteries and accumulators

**Application**

1. This Schedule applies in relation to waste batteries and accumulators.

**Exercise of relevant functions**

2.—(1) The regulator must exercise its relevant functions so as to ensure compliance with Article 12(2) of the Batteries Directive.

(2) The regulator must exercise its relevant functions so as to ensure compliance with Article 3 of Regulation (EU) No 493/2012, and for the purposes of Article 3(4) of that Regulation the regulator is the competent authority.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(3) In sub-paragraph (2), “Regulation (EU) No 493/2012” means Commission Regulation (EU) No 493/2012 laying down, pursuant to Directive 2006/66/EC of the European Parliament and of the Council, detailed rules regarding the calculation of recycling efficiencies of the recycling processes of waste batteries and accumulators <sup>M109</sup>.

**Marginal Citations**

**M109** OJ No L 151, 12.6.2012, p 9.

SCHEDULE 20

Regulation 35(1)

Mining waste operations

**Application**

1. This Schedule applies in relation to every mining waste operation.

**Interpretation**

2.—(1) In this Schedule—

“fire and rescue authority” means the fire and rescue authority under the Fire and Rescue Services Act 2004 <sup>M110</sup> for the area in which the mining waste facility is located;

“mining waste facility” means a “waste facility” as defined in Article 3(15) of the Mining Waste Directive but excludes those facilities mentioned in Article 24(2) or in the first paragraph of Article 24(4) of that Directive;

“mining waste operation” means the management of extractive waste, whether or not involving a mining waste facility, but does not include the activities in Article 2(2)(c) of the Mining Waste Directive;

“waste management plan” means a plan of the type described in Article 5(1) of the Mining Waste Directive which has the objectives in Article 5(2) and contains the elements and information set out in Article 5(3) of that Directive.

<sup>F243</sup>(2) .....

**Textual Amendments**

**F243** Sch. 20 para. 2(2) omitted (31.12.2020) by virtue of The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(23); 2020 c. 1, Sch. 5 para. 1(1)

**Marginal Citations**

**M110** 2004. c. 21; section 1 was amended by paragraph 10(1) and (2) of Part 1 of Schedule 2 to the Civil Contingencies Act 2004 (c. 36).

**Applications for grant or variation of an environmental permit**

3.—(1) The regulator must require that every application for the grant or variation of an environmental permit in relation to a mining waste operation involving a mining waste facility to which Article 7 of the Mining Waste Directive applies includes—

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- (a) the information specified in Article 7(2) of that Directive, and
- (b) where Article 6 of the Directive applies, the information mentioned in the second sentence of the third paragraph of Article 6(3).

(2) Where the regulator receives an application for the grant or variation of an environmental permit and that application includes the information required under sub-paragraph (1)(b), the regulator must immediately forward the information to the fire and rescue authority.

(3) The regulator must require that every application for the grant or variation of an environmental permit in relation to any other mining waste operation includes a waste management plan.

(4) For the purposes of this paragraph, the regulator may accept a waste management plan produced pursuant to other legislation which complies with Article 5(1) to (4) of the Mining Waste Directive if it has been reviewed and amended in accordance with Article 5(4) of that Directive.

### Review of environmental permits

4. The regulator must periodically review an environmental permit relating to a mining waste facility if Article 7 of the Mining Waste Directive applies in respect of that facility and any of the circumstances in Article 7(4) of the Directive apply in relation to it.

### Classification of mining waste facilities

5. The regulator must exercise its functions so as to ensure compliance with Article 9 of the Mining Waste Directive in respect of any mining waste facility to which Article 7 of that Directive does not apply.

### Inspections

6. The regulator must inspect every mining waste facility to which Article 7 of the Mining Waste Directive applies so as to comply with the requirements of Article 17(1) of that Directive [<sup>F244</sup>and Commission Implementing Decision (EU) 2020/248 laying down technical guidelines for inspections in accordance with Article 17 of [Directive 2006/21/EC](#)].

#### Textual Amendments

**F244** Words in Sch. 20 para. 6 inserted (1.10.2020) by [The Waste \(Circular Economy\) \(Amendment\) Regulations 2020 \(S.I. 2020/904\)](#), regs. 1(1), **21(7)**

### Exercise of relevant functions

7. The regulator must exercise its relevant functions so as to ensure compliance with the following requirements of the Mining Waste Directive—

- (a) Article 2(4);
- (b) Article 4;
- (c) Article 5(4) and (6);
- (d) Article 6(2), the first and second paragraphs of Article 6(3), the first paragraph of Article 6(4) to the extent that it relates to plans prepared under the first paragraph of Article 6(3) and the second paragraph of Article 6(4) to the extent that it relates to the regulator's functions;
- (e) Article 7(1) and (3)(a);
- (f) Article 10;

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- (g) Article 11;
- (h) Article 12;
- (i) Article 13;
- (j) Article 14(1) to (3);
- (k) Article 17(2);
- (l) Article 24(1).

### **Public participation**

8. The regulator must exercise its functions under the public participation provisions in relation to mining waste facilities to which Article 7 of the Mining Waste Directive applies so as to meet the requirements of Article 8 of that Directive.

### **Derogation from requirements**

9.—(1) The regulator must exercise its functions to ensure that the requirements mentioned in the first paragraph of Article 2(3) of the Mining Waste Directive do not apply to the substances mentioned in that paragraph where they result from an operation mentioned in that paragraph, to the extent allowed by that paragraph.

(2) The regulator must waive the requirements of the Mining Waste Directive in relation to the deposit of the substances mentioned in the second paragraph of Article 2(3) of that Directive if the regulator is satisfied that the requirements of Article 4 of that Directive are met.

(3) The regulator must waive the requirements mentioned in the third paragraph of Article 2(3) of the Mining Waste Directive in relation to the waste mentioned in that paragraph to the extent allowed by that paragraph.

### **Closure of a mining waste facility**

10.—(1) The regulator must set out any reasoned decision under Article 12(2)(c) of the Mining Waste Directive in a closure notice served on the operator.

(2) A closure notice must, in addition to stating the regulator's reasons for requiring initiation of the closure procedure, specify—

- (a) the steps the operator is required to take to initiate the procedure, and
- (b) the period within which they must be taken.

(3) The regulator may withdraw a closure notice at any time by further notice served on the operator.

(4) Closure of a mining waste facility does not relieve the operator of liability under the environmental permit conditions that relate to the facility.

(5) The regulator must exercise its functions so as to ensure compliance with Article 14(4) of the Mining Waste Directive.

### **Inventory of closed mining waste facilities**

11. The regulator must maintain and make available to the public an inventory of closed mining waste facilities so as to ensure compliance with Article 20 of the Mining Waste Directive.

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### Developments in best available techniques

**12.—(1)** The regulator must ensure that it is informed of developments in best available techniques.

(2) In this paragraph, “best available techniques” has the meaning given in Article 3(10) of the Industrial Emissions Directive.

### Planning permission conditions

**13.—(1)** Where—

- (a) a mining waste operation is the subject of an environmental permit,
- (b) that operation has been granted planning permission subject to conditions (“planning conditions”), and
- (c) there is an inconsistency between the environmental permit conditions and the planning conditions,

the environmental permit conditions prevail.

(2) In this paragraph, “planning permission” means planning permission under the Town and Country Planning Act 1990<sup>M111</sup> and includes—

- (a) a certificate under section 191 of that Act<sup>M112</sup>, and
- (b) an established use certificate under section 192 of that Act<sup>M113</sup>, as originally enacted, which continues to have effect for the purposes of subsection (4) of that section.

#### Marginal Citations

**M111** 1990 c. 8.

**M112** Section 191 was substituted by section 10(1) of the [Planning and Compensation Act 1991 \(c. 34\)](#) and amended by section 124(3) of the [Localism Act 2011 \(c. 20\)](#) and paragraph 6(1) and (3) of Schedule 4 to the [Mobile Homes \(Wales\) Act 2013 \(anaw. 6\)](#).

**M113** Section 192 was substituted by section 10(1) of the [Planning and Compensation Act 1991](#).

### Applications for grant or variation of an environmental permit for a Category A mining waste facility

**14.—(1)** The regulator must not grant an application for the grant or variation of an environmental permit relating to a Category A mining waste facility until it has been notified by the fire and rescue authority that it has the information necessary to enable it to draw up an external emergency plan.

(2) The regulator must refuse an application relating to a Category A mining waste facility that is an existing mining waste facility upon receipt of a notice by the fire and rescue authority stating that the operator has not provided the information necessary to enable the fire and rescue authority to draw up an external emergency plan.

(3) In this paragraph, “external emergency plan” means a plan as required under the third paragraph of Article 6(3) of the Mining Waste Directive that has the objectives specified in the first paragraph of Article 6(4) of that Directive.

## SCHEDULE 21

Regulation 35(1)

### Water discharge activities

#### Application

1. This Schedule applies in relation to every water discharge activity.

#### Interpretation

2. In this Schedule—
  - “discharging sewer” means the sewer or works from which sewage effluent is discharged;
  - “discharging undertaker” means the sewerage undertaker in which a discharging sewer is vested;
  - “main connection” has the same meaning as in section 110A of the Water Industry Act 1991 <sup>M114</sup>,
  - “pipe” has the same meaning as in the 1991 Act;
  - “sending undertaker” means a sewerage undertaker which discharges sewage effluent into the discharging sewer or other sewer or works vested in the discharging undertaker;
  - “waste” in the term “waste matter” includes—
    - (a) anything that is waste for the purposes of the Waste Framework Directive and is not excluded from the scope of that Directive by Article 2(1), (2) or (3) of that Directive;
    - (b) anything that is waste for the purposes of the Mining Waste Directive and is not excluded from the scope of that Directive by Article 2(2) of that Directive.

#### Marginal Citations

**M114** 1991 c. 56; section 110A was inserted by section 45 of the [Competition and Service \(Utilities\) Act 1992](#) (c. 43) and substituted by section 9(1) of the [Water Act 2014](#) (c. 21).

#### Meaning of “water discharge activity”

- 3.—(1) A “water discharge activity” means any of the following—
  - (a) the discharge or entry to inland freshwaters, coastal waters or relevant territorial waters of any—
    - (i) poisonous, noxious or polluting matter,
    - (ii) waste matter, or
    - (iii) trade effluent or sewage effluent;
  - (b) the discharge from land through a pipe into the sea outside the seaward limits of relevant territorial waters of any trade effluent or sewage effluent;
  - (c) the removal from any part of the bottom, channel or bed of any inland freshwaters of a deposit accumulated by reason of any dam, weir or sluice holding back the waters, by causing it to be carried away in suspension in the waters, unless the activity is carried on in the exercise of a power conferred by or under any enactment relating to land drainage, flood prevention or navigation;

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- (d) the cutting or uprooting of a substantial amount of vegetation in any inland freshwaters or so near to any such waters that it falls into them, where it is not reasonable to take steps to remove the vegetation from these waters;
  - (e) an activity in respect of which a notice under paragraph 4 or 5 has been served and has taken effect.
- (2) A discharge or an activity that might lead to a discharge is not a “water discharge activity”—
- (a) if the discharge is made, or authorised to be made, by or under any prescribed statutory provision, or
  - (b) if the discharge is of trade effluent or sewage effluent from a vessel.
- (3) In determining whether a discharge or an activity is a water discharge activity, no account must be taken of any radioactivity possessed by any substance or article or by any part of any premises.

#### **Highway drains – notice requiring environmental permit**

- 4.—(1) This paragraph applies where—
- (a) a person is operating a highway drain, and
  - (b) that activity might lead to a discharge mentioned in paragraph 3(1)(a) or (b).
- (2) The regulator may serve a notice on the person operating the highway drain requiring the person, from the date the notice takes effect, to hold an environmental permit authorising the carrying on of that activity.
- (3) A notice under this paragraph takes effect on the date specified in it, which must be at least 6 months after it is served.

#### **Discharge of trade effluent or sewage effluent into lake or pond – notice requiring environmental permit**

- 5.—(1) The regulator may serve a notice on a person who discharges trade effluent or sewage effluent into the waters of any lake or pond which are not inland freshwaters requiring the person, from the date the notice takes effect, to hold an environmental permit authorising the carrying on of that activity.
- (2) A notice under this paragraph takes effect on the date specified in it, which must be at least 3 months after it is served.

#### **Liability resulting from discharge of sewage effluent from public sewer**

- 6.—(1) This paragraph applies for the purpose of determining liability for a water discharge activity that consists of a discharge of sewage effluent from a discharging sewer vested in a discharging undertaker.
- (2) A discharging undertaker causes a discharge of sewage effluent if—
- (a) matter included in the discharge is received by the discharging undertaker into the discharging sewer or into any other sewer or works vested in it,
  - (b) the discharging undertaker was bound (either unconditionally or subject to conditions which were observed) to receive the matter into the discharging sewer or other sewer or works, and
  - (c) sub-paragraph (3) does not apply.
- (3) This sub-paragraph applies if, before the discharging undertaker discharges the sewage effluent from the discharging sewer, the sending undertaker, under an agreement with the discharging



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undertaker under section 110A of the Water Industry Act 1991, discharges the sewage effluent through a main connection into—

- (a) the discharging sewer, or
- (b) any other sewer or works vested in the discharging undertaker.

(4) If sub-paragraph (3) applies, the sending undertaker causes the discharge if—

- (a) matter included in the discharge is received by the sending undertaker into a sewer or works vested in it, and
- (b) it was bound (either conditionally or subject to conditions which were observed) to receive that matter into that sewer or works.

(5) [<sup>F245</sup>In relation to Wales, a sewerage undertaker] is not guilty of an offence under regulation 38(1) in relation to a water discharge activity that consists of a discharge of sewage effluent from a sewer or works vested in it if—

- (a) the contravention is attributable to a discharge which another person caused or knowingly permitted to be made into the sewer or works,
- (b) the undertaker either was not bound to receive the discharge into the sewer or works or was bound to receive it there subject to conditions which were not observed, and
- (c) the undertaker could not reasonably have been expected to prevent the discharge into the sewer or works.

[<sup>F246</sup>(5A) In relation to England, a sewerage undertaker is not guilty of an offence under regulation 38(1) or (2) in relation to a water discharge activity that consists of a discharge of sewage effluent from a sewer or works vested in it if—

- (a) the contravention is attributable to a discharge which another person caused or knowingly permitted to be made into the sewer or works,
- (b) the undertaker either was not bound to receive the discharge into the sewer or works or was bound to receive it there subject to conditions which were not observed, and
- (c) the undertaker could not reasonably have been expected to prevent the discharge into the sewer or works.]

(6) A person is not guilty of an offence under regulation 38(1) in relation to a discharge which the person caused or knowingly permitted to be made into a sewer or works vested in a sewerage undertaker if that undertaker was bound to receive the discharge, either unconditionally or subject to conditions which were observed.

#### Textual Amendments

**F245** Words in Sch. 21 para. 6(5) substituted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **6(a)**

**F246** Sch. 21 para. 6(5A) inserted (2.10.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) Regulations 2023 \(S.I. 2023/651\)](#), regs. 1(2), **6(b)**

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## SCHEDULE 22

Regulation 35(1)

## Groundwater activities

**Application**

1. This Schedule applies in relation to every groundwater activity.

**Interpretation**

2. In this Schedule—

“body of groundwater” has the same meaning as in the Water Framework Directive;

“direct input” in relation to groundwater means the introduction of a pollutant to groundwater without percolation through soil or subsoil;

“indirect input” in relation to groundwater means the introduction of a pollutant to groundwater after percolation through soil or subsoil;

“surface waters” has the same meaning as in the Water Framework Directive.

**Meaning of “groundwater activity”**

3.—(1) Subject to sub-paragraphs (2) and (3), “groundwater activity” means any of the following—

- (a) the discharge of a pollutant that results in the direct input of that pollutant to groundwater;
- (b) the discharge of a pollutant in circumstances that might lead to an indirect input of that pollutant to groundwater;
- (c) any other discharge that might lead to the direct or indirect input of a pollutant to groundwater;
- (d) an activity in respect of which a notice under paragraph 10 has been served and has taken effect;
- (e) an activity that might lead to a discharge mentioned in paragraph (a), (b) or (c), where that activity is carried on as part of the operation of a regulated facility of another class.

(2) A discharge or an activity that might lead to a discharge is not a “groundwater activity” if the discharge is—

- (a) made, or authorised to be made, by or under any prescribed statutory provision, or
- (b) of trade effluent or sewage effluent from a vessel.

(3) The regulator may determine that a discharge, or an activity that might lead to a discharge, is not a groundwater activity if the input of the pollutant—

- (a) is the consequence of an accident or exceptional circumstances of natural cause that could not reasonably have been foreseen, avoided or mitigated,
- (b) is or would be of a quantity and concentration so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater, or
- (c) is or would be incapable, for technical reasons, of being prevented or limited without using—
  - (i) measures that would increase risks to human health or to the quality of the environment as a whole, or
  - (ii) disproportionately costly measures to remove quantities of pollutants from, or otherwise control their percolation in, contaminated ground or subsoil.

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- (4) The regulator must keep a record of all determinations under sub-paragraph (3).

#### Meaning of “hazardous substance”

4.—(1) A hazardous substance is any substance or group of substances that are toxic, persistent and liable to bio-accumulate, or that give rise to an equivalent level of concern.

(2) This includes in particular the following when they meet the criteria in sub-paragraph (1)—

- (a) organohalogen compounds and substances which may form such compounds in the aquatic environment;
- (b) organophosphorous compounds;
- (c) organotin compounds;
- (d) substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment;
- (e) hydrocarbons and organic substances;
- (f) cyanides;
- (g) metals (in particular, cadmium and mercury) and their compounds;
- (h) arsenic and its compounds;
- (i) biocides and plant protection products.

(3) The regulator must publish a list of substances that it considers to be hazardous substances.

#### Meaning of “non-hazardous pollutant”

5. A non-hazardous pollutant is any pollutant other than a hazardous substance.

#### Exercise of relevant functions

6. For the [<sup>F247</sup>purpose of the duties in regulation 3 of the WFD Regulations], the regulator must, in exercising its relevant functions, take all necessary measures—

- (a) to prevent the input of any hazardous substance to groundwater, and
- (b) to limit the input of non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater.

#### Textual Amendments

**F247** Words in Sch. 22 para. 6 substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(24)(a); 2020 c. 1, Sch. 5 para. 1(1)

#### Applications for grant of environmental permit

7.—(1) This paragraph applies to an application for the grant of an environmental permit relating to—

- (a) a discharge mentioned in paragraph 3(1)(a), (b) or (c), or
- (b) an activity that might lead to such a discharge.

(2) When the regulator receives an application, it must ensure that all necessary investigations have been carried out to ensure that it grants any permit in accordance with paragraph 6.

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(3) If it grants the permit, it must include conditions requiring all necessary technical precautions to be observed to ensure the objectives of paragraph 6 are achieved.

(4) A permit may not be granted [<sup>F248</sup>in relation to Wales]—

(a) without examination of—

- (i) the hydrogeological conditions of the area concerned,
- (ii) the possible purifying powers of the soil and subsoil, and
- (iii) the risk of pollution and alteration of the quality of the groundwater from the discharge, and

(b) without establishing whether the input of pollutants to groundwater is a satisfactory solution from the point of view of the environment.

[<sup>F249</sup>(4A) A permit may not be granted in relation to England—

(a) without an assessment of—

- (i) the relevant hydrogeological conditions,
- (ii) the possible purifying powers of soil and subsoil, and
- (iii) the risk of pollution and alteration of the quality of the groundwater from the discharge, and

(b) without establishing whether the input of pollutants to groundwater is a satisfactory solution from the point of view of the environment.]

(5) A permit may only be granted if the regulator has checked that the groundwater (and, in particular, its quality) will undergo the requisite surveillance.

#### Textual Amendments

**F248** Words in Sch. 22 para. 7(4) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), 7(a)(i)

**F249** Sch. 22 para. 7(4A) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), 7(a)(ii)

#### Groundwater activities for which a permit may be granted

8.—[<sup>F250</sup>(1)] Despite paragraph 6, provided it does not compromise the achievement of any of the environmental objectives relating to groundwater in [<sup>F251</sup>relation to a river basin district], the regulator may grant an environmental permit for—

- (a) the injection of water containing substances resulting from the operations for exploration and extraction of hydrocarbons or mining activities, and injection of water for technical reasons, into geological formations from which hydrocarbons or other substances have been extracted or into geological formations which for natural reasons are permanently unsuitable for other purposes, provided that the injection does not contain substances other than those resulting from the above operations;
- (b) the reinjection of pumped groundwater from mines and quarries or associated with the construction or maintenance of civil engineering works;
- (c) the injection of natural gas or liquefied petroleum gas for storage purposes into geological formations which for natural reasons are permanently unsuitable for other purposes;
- (d) the injection of carbon dioxide streams for storage purposes into geological formations which for natural reasons are permanently unsuitable for other purposes, provided that such injection is made in accordance with [<sup>F252</sup>Chapter 3 of Part 1 of the Energy Act 2008

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- and other EU-derived domestic legislation which transposed Directive 2009/31/EC on the geological storage of carbon dioxide in relation to England and Wales];
- (e) the injection of natural gas or liquefied petroleum gas for storage purposes into other geological formations where there is an overriding need for security of gas supply, and where the injection is such as to prevent any present or future danger of deterioration in the quality of any receiving groundwater;
  - (f) construction, civil engineering and building works and similar activities on or in the ground which come into contact with groundwater;
  - (g) discharges of small quantities of substances for scientific purposes for characterisation, protection or remediation of bodies of water limited to the amount strictly necessary for the purposes concerned;
  - (h) interventions in surface waters for the purposes, amongst others, of mitigating the effects of floods and droughts, and for the management of waters and waterways;
  - (i) the artificial recharge or augmentation of a body of groundwater for the purposes of groundwater management;
  - (j) reinjection into the same aquifer of water used for geothermal purposes.
- [<sup>F253</sup>(k) in relation to England, any groundwater activity to remediate the effects of pollution in groundwater or in the land or waters surrounding groundwater;
- (l) in relation to England, the injection of any substance into groundwater to increase the flow of fluids or gas to a well or borehole in connection with the extraction or use of any source of energy.]
- [<sup>F254</sup>(2) In sub-paragraph (1)(k), the reference to remediating the effects of pollution is—
- (a) in the case of the groundwater in question, to doing any works, carrying out any operations or taking any steps to prevent or minimise, or remedy or mitigate the effects of pollution, or
  - (b) in the case of land or waters surrounding the groundwater in question, to restoring the land or waters to (or closer to) their former state.]

#### Textual Amendments

- F250** Sch. 22 para. 8 renumbered as Sch. 22 para. 8(1) (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **7(b)(i)**
- F251** Words in Sch. 22 para. 8 substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(24)(b)(i)**; 2020 c. 1, Sch. 5 para. 1(1)
- F252** Words in Sch. 22 para. 8(d) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, **2(24)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F253** Sch. 22 para. 8(1)(k)(l) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **7(b)(ii)**
- F254** Sch. 22 para. 8(2) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), **7(b)(iii)**

#### Prohibition notice

- 9.**—(1) This paragraph applies where—
- (a) any person is carrying on, or proposing to carry on, any activity on or in the ground, and
  - (b) that activity might lead to a discharge mentioned in paragraph 3(1)(a), (b) or (c).
- (2) The regulator may serve a notice on the person prohibiting the carrying on of the activity.

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(3) The regulator may withdraw a prohibition notice at any time by further notice served on the person.

### Notice requiring environmental permit

**10.**—(1) This paragraph applies where—

- (a) any person is carrying on, or proposing to carry on, any activity on or in the ground, and
- (b) that activity might lead to a discharge mentioned in paragraph 3(1)(a), (b) or (c).

(2) The regulator may serve a notice on the person requiring the person, from the date the notice takes effect, to hold an environmental permit authorising the carrying on of the activity.

(3) A notice under sub-paragraph (2) takes effect on the date specified in it, but—

- (a) a notice served for the purpose of paragraph 11 must not take effect until at least 6 months after it is served, and
- (b) a notice served for the purpose of paragraph 12, or for any other purpose, must not take effect until at least 3 months after it is served.

### Notice in relation to a highway drain

**11.** A highway authority or other person entitled to keep open a highway drain by virtue of section 100 of the 1980 Act<sup>M115</sup> who operates a highway drain other than under and in accordance with an environmental permit is not guilty of an offence under regulation 38(1) unless—

- (a) the regulator has served a notice on that person under paragraph 10 of this Schedule, and
- (b) the notice has taken effect.

#### Marginal Citations

**M115** Section 100 was amended by paragraph 21 of Schedule 4 to the [Local Government Act 1985 \(c. 51\)](#), [paragraph 62](#) of Schedule 25 to the [Water Act 1989 \(c. 15\)](#), [paragraph 36\(1\)](#) of Schedule 1 to the [Water Consolidation \(Consequential Provisions\) Act 1991 \(c. 60\)](#) and paragraph 9 of Schedule 7 to the [Local Government \(Wales\) Act 1994 \(c. 19\)](#).

### Guidance

**12.**—(1) The appropriate authority may issue guidance to persons causing or liable to cause inputs of pollutants to groundwater with respect to the steps they must take to prevent or limit those pollutants from entering groundwater.

(2) The regulator must take into account whether or not such guidance is or is likely to be complied with before taking any enforcement action under these Regulations.

(3) Guidance must be publicised as the appropriate authority sees fit.

### Liability resulting from discharge of sewage effluent from public sewer

**13.**—(1) This paragraph applies for the purpose of determining liability for a groundwater activity that consists of a discharge of sewage effluent from a discharging sewer vested in a discharging undertaker.

(2) A discharging undertaker causes a discharge of sewage effluent if—

- (a) matter included in the discharge is received by the discharging undertaker into the discharging sewer or into any other sewer or works vested in it,

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- (b) the discharging undertaker was bound (either unconditionally or subject to conditions which were observed) to receive the matter into the discharging sewer or other sewer or works, and
  - (c) sub-paragraph (3) does not apply.
- (3) This sub-paragraph applies if, before the discharging undertaker discharges the sewage effluent from the discharging sewer, the sending undertaker, under an agreement with the discharging undertaker under section 110A of the Water Industry Act 1991<sup>M116</sup>, discharges the sewage effluent through a main connection into—
- (a) the discharging sewer, or
  - (b) any other sewer or works vested in the discharging undertaker.
- (4) If sub-paragraph (3) applies, the sending undertaker causes the discharge if—
- (a) matter included in the discharge was received by the sending undertaker into a sewer or works vested in it, and
  - (b) it was bound (either conditionally or subject to conditions which were observed) to receive that matter into that sewer or works.
- (5) [<sup>F255</sup>In relation to Wales, a sewerage undertaker] is not guilty of an offence under regulation 38(1) in relation to a groundwater activity that consists of a discharge of sewage effluent from a sewer or works vested in it if—
- (a) the contravention is attributable to a discharge which another person caused or knowingly permitted to be made into the sewer or works,
  - (b) the undertaker either was not bound to receive the discharge into the sewer or works or was bound to receive it there subject to conditions which were not observed, and
  - (c) the undertaker could not reasonably have been expected to prevent the discharge into the sewer or works.
- [<sup>F256</sup>(5A) In relation to England, a sewerage undertaker is not guilty of an offence under regulation 38(1) or (2) in relation to a groundwater activity that consists of a discharge of sewage effluent from a sewer or works vested in it if—
- (a) the contravention is attributable to a discharge which another person caused or knowingly permitted to be made into the sewer or works,
  - (b) the undertaker either was not bound to receive the discharge into the sewer or works or was bound to receive it there subject to conditions which were not observed, and
  - (c) the undertaker could not reasonably have been expected to prevent the discharge into the sewer or works.]
- (6) A person is not guilty of an offence under regulation 38(1) in relation to a discharge which the person caused or knowingly permitted to be made into a sewer or works vested in a sewerage undertaker if that undertaker was bound to receive the discharge, either unconditionally or subject to conditions which were observed.

#### Textual Amendments

**F255** Words in Sch. 22 para. 13(5) substituted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), 7(c)(i)

**F256** Sch. 22 para. 13(5A) inserted (2.10.2023) by The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 (S.I. 2023/651), regs. 1(2), 7(c)(ii)

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### Marginal Citations

**M116** 1991 c. 56; section 110A was inserted by section 45 of the [Competition and Service \(Utilities\) Act 1992](#) (c. 43) and substituted by section 9(1) of the [Water Act 2014](#) (c. 21).

## SCHEDULE 23

Regulation 35(1)

### Radioactive substances activities

## PART 1

### Application

#### Application

1. This Schedule applies in relation to every radioactive substances activity.

## PART 2

### Interpretation

#### Interpretation

- 1.—(1) In this Schedule—

“article” includes a part of an article;

“Bq” means becquerels;

“contamination” occurs where a substance or article is so affected by—

- (a) absorption, admixture or adhesion of radioactive material or radioactive waste, or
- (b) the emission of neutrons or ionising radiation,

as to become radioactive or to possess increased radioactivity;

“disposal” in relation to waste includes its removal, deposit, destruction, discharge (whether into water or into the air or into a sewer or drain or otherwise) or burial (whether underground or otherwise) and “dispose of” is to be construed accordingly;

“m”, where it appears after a radionuclide, means a radionuclide in a metastable state of radioactive decay in which gamma photons are emitted;

“mobile radioactive apparatus” means any apparatus, equipment, appliance or other thing which is radioactive material and—

- (a) is constructed or adapted for being transported from place to place, or
- (b) is portable and designed or intended to be used for releasing radioactive material into the environment or introducing it into organisms;

“nuclear site” means—

- (a) any site in respect of which a nuclear site licence is for the time being in force, or
- (b) any site in respect of which, after the revocation or surrender of a nuclear site licence, the period of responsibility of the licensee has not yet come to an end,



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and “licensee”, when used in relation to a nuclear site, and “period of responsibility” have the same meaning as in the Nuclear Installations Act 1965 <sup>M117</sup>;

“premises” includes any land, whether covered by buildings or not, including any place underground and any land covered by water;

“relevant liquid” means a liquid which—

- (a) is non-aqueous, or
- (b) is classified (or would be so classified in the absence of its radioactivity) under Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures <sup>M118</sup> as having any of the following hazard classes and hazard categories (as defined in that Regulation)—
  - (i) acute toxicity: categories 1, 2 or 3,
  - (ii) skin corrosion/irritation: category 1 corrosive, sub-categories: 1A, 1B or 1C, or
  - (iii) hazardous to the aquatic environment: acute category 1 or chronic categories 1 or 2;

“substance” means any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour;

“Table 1”, “Table 2”, “Table 3” mean the tables with those numbers in Part 3 of this Schedule;

“undertaking” includes any trade, business or profession and—

- (a) in relation to a public or local authority, includes any of the powers or duties of that authority;
- (b) in relation to any other body of persons (whether corporate or unincorporate), includes any of the activities of that body;

“waste” should be construed in accordance with paragraph 3(2).

(2) In this Schedule, where any reference is made to a substance or article possessing a concentration or quantity of radioactivity which exceeds the value specified in a column in either of Tables 1 and 2, [<sup>F257</sup> or any of Tables 4A, 5 or 7] in Part 6 of this Schedule, that value is exceeded if—

- (a) where only one radionuclide which is listed or described in the relevant table is present in the substance or article, the concentration or quantity of that radionuclide exceeds the concentration or quantity specified in the appropriate entry of that column in that table, or
- (b) where more than one radionuclide which is listed or described in the relevant table is present, the sum of the quotient values of all such radionuclides in the substance or article, as determined by the summation rule following the table (as it applies to that column), is greater than one,

and any reference to a concentration or quantity of radioactivity not exceeding such a value shall be construed accordingly.

#### Textual Amendments

**F257** Words in Sch. 23 Pt. 2 para. 1(2) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 2](#)

#### Marginal Citations

**M117** 1965 c. 57; the definition of “period of responsibility” was substituted by paragraph 20 of Part 2 of Schedule 12 to the [Energy Act 2013 \(c. 32\)](#).

**M118** OJ No L 353, 31.12.2008, p 1, as last amended by Commission Regulation (EU) No 1297/2014 (OJ No L 350, 6.12.2014, p 1).

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Interpretation: NORM industrial activity

2.—(1) Subject to sub-paragraph (2), in this Schedule—

“type 1 NORM industrial activity” means—

- (a) the production and use of thorium, or thorium compounds, and the production of products where thorium is deliberately added, or
- (b) the production and use of uranium or uranium compounds, and the production of products where uranium is deliberately added;

“type 2 NORM industrial activity” means—

- (a) the extraction and production of rare earth elements and rare earth element alloys,
- (b) the mining and processing of ores other than uranium ore,
- (c) the production of oil and gas,
- (d) the removal and management of radioactive scales and precipitates from equipment associated with industrial activities,
- (e) any industrial activity utilising phosphate ore,
- (f) the manufacture of titanium dioxide pigments,
- (g) the extraction and refining of zircon and manufacture of zirconium compounds,
- (h) the production of tin, copper, aluminium, zinc, lead and iron and steel,
- (i) any activity related to coal mine de-watering plants,
- (j) china clay extraction,
- (k) water treatment associated with provision of drinking water, <sup>F258</sup> ...
- (ka) [<sup>F259</sup>geothermal energy production, or]
- (l) the remediation of contamination from any type 1 NORM industrial activity or any of the activities listed above.

(2) An activity which involves the processing of radionuclides of natural terrestrial or cosmic origin for their radioactive, fissile or fertile properties is not a type 1 NORM industrial activity or a type 2 NORM industrial activity.

#### Textual Amendments

**F258** Word in Sch. 23 Pt. 2 para. 2(1) omitted (2.5.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 3**

**F259** Words in Sch. 23 Pt. 2 para. 2(1) inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 3**

### Interpretation: “radioactive material”, “radioactive waste” and “waste”

3.—(1) In this Schedule, except as provided by paragraph 7, 8, 9<sup>[F260]</sup>, 9A] or 10—

“radioactive material” means a substance or article which is not waste, and which satisfies the requirements of paragraph 4, 5 or 6 as they apply to such a substance or article;

“radioactive waste” means a substance or article which is waste, and which satisfies the requirements of paragraph 4, 5 or 6.

(2) In this Schedule—

- (a) “waste” includes—

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- (i) any substance which constitutes scrap material or an effluent or other unwanted surplus substance arising from the application of any process, and
  - (ii) any substance or article which requires to be disposed of as being broken, worn out, contaminated or otherwise spoilt, and
- (b) any substance or article which, in the course of carrying on any undertaking, is discharged, discarded or otherwise dealt with as if it were waste is presumed to be waste unless the contrary is proved.

#### Textual Amendments

**F260** Word in Sch. 23 Pt. 2 para. 3(1) inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 4**

#### NORM industrial activities

- 4.—(1) Sub-paragraph (2) applies to a substance or article which—
- (a) arises from or is used in a type 1 NORM industrial activity,
  - (b) is waste which arises from a type 2 NORM industrial activity, or
  - (c) is contaminated by a substance or article described in paragraph (a) or (b), including where such contamination occurs indirectly through another contaminated substance or article.
- (2) A substance or article to which this sub-paragraph applies is radioactive material or radioactive waste where it has a concentration of radioactivity which exceeds the following values in Table 1—
- (a) for a substance or article which is a solid or a substance which is a relevant liquid, the value specified in column 2,
  - (b) for a substance which is any other liquid, the value specified in column 3, or
  - (c) for a substance which is a gas, the value specified in column 4.

#### Processed radionuclides of natural terrestrial or cosmic origin

5. A substance or article is radioactive material or radioactive waste where—
- (a) the substance or article contains one or more of the radionuclides of natural terrestrial or cosmic origin which are listed in column 1 of Table 2,
  - (b) the substance or article—
    - (i) is processed or is intended to be processed for the radioactive, fissile or fertile properties of those radionuclides, or
    - (ii) is contaminated by a substance or article to which paragraph (i) applies, including where such contamination occurs indirectly through another contaminated substance or article, and
  - (c) the substance or article is—
    - (i) a solid or a relevant liquid and it has a concentration of radioactivity which exceeds the value specified in column 2 of Table 2, or
    - (ii) any other liquid or a gas.

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### Radionuclides not of natural terrestrial or cosmic origin

6. A substance or article which contains one or more radionuclides that are not of natural terrestrial or cosmic origin is radioactive material or radioactive waste where—

- (a) the substance or article is a solid or a relevant liquid and it has a concentration of radioactivity which exceeds the value specified in column 2 of Table 2, or
- (b) the substance is any other liquid or a gas.

### [<sup>F261</sup>Dilution to reduce concentration of radioactivity

6A. For the purposes of paragraphs 4, 5 and 6, a substance or article is to be treated as having a concentration of radioactivity which exceeds the value referred to in paragraph 4(2), 5(c)(i) or 6(a), if a person has diluted the substance or article with the intention of ensuring that its concentration of radioactivity does not exceed that value.]

#### Textual Amendments

**F261** Sch. 23 Pt. 2 para. 6A inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 5**

### Radionuclides with a short half-life

7. A substance or article is not radioactive material or radioactive waste where none of the radionuclides which it contains or which it consists of has a half-life exceeding 100 seconds.

### Radionuclides not of natural terrestrial or cosmic origin in background radioactivity

- 8.—(1) A substance or article is not radioactive material or radioactive waste where—
- (a) the substance or article is contaminated as a result of a climatic process, or a combination of such processes, by radionuclides which—
    - (i) are not of natural terrestrial or cosmic origin, and
    - (ii) are not present in the substance or article at a concentration that exceeds that found normally in such a substance or article in the United Kingdom, and
  - (b) in the absence of such contamination, the substance or article would not otherwise be radioactive material or radioactive waste under this Schedule.

(2) In this paragraph, a “climatic process” includes wind, precipitation and the general circulation of the atmosphere and oceans.

### Contaminated substances or articles

- 9.—(1) Subject to sub-paragraph (2), a substance or article is not radioactive material where—
- (a) the substance or article is contaminated, but has not been so contaminated with the intention of utilising its radioactive, fissile or fertile properties, and
  - (b) in the absence of such contamination, the substance or article would not otherwise be radioactive material under this Schedule.

(2) Sub-paragraph (1) only applies while the substance or article is kept on the premises on which the contamination occurred.

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## [<sup>F262</sup>Historic radium contamination

**9A.** A substance or article is not radioactive material or radioactive waste where the substance or article arises from the remediation of land contaminated by radium and—

- (a) the substance or article contains Ra-226 or its progeny;
- (b) in the absence of Ra-226 or its progeny, the substance or article would not otherwise be radioactive material or radioactive waste under this Schedule;
- (c) the contamination occurred prior to 13th May 2000; and
- (d) the concentration of Ra-226 or any of its progeny does not exceed the following values—
  - (i) for a substance or article which is a solid or a substance which is a relevant liquid, 1 Bq/g;
  - (ii) for a substance which is any other liquid, 1 Bq/l; or
  - (iii) for a substance which is a gas, 0.01 Bq/m<sup>3</sup>.

### Textual Amendments

**F262** Sch. 23 Pt. 2 para. 9A inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 6**

## Substances or articles after disposal

**10.—(1)** A substance or article is not radioactive material or radioactive waste during the excluded period where—

- (a) the substance or article has been disposed of lawfully, and at the time of the disposal no further act of disposal is intended in respect of it, or
  - (b) the substance or article—
    - (i) is contaminated by a substance or article to which paragraph (a) applies, including where such contamination occurs indirectly through another contaminated substance or article,
    - (ii) in the absence of such contamination, would not otherwise be radioactive material or radioactive waste under this Schedule, and
    - (iii) is not contaminated with the intention of using its radioactive, fissile or fertile properties.
- (2) In sub-paragraph (1), “the excluded period” means the period—
- (a) beginning at the relevant start time, and
  - (b) ending at the time that there is an increase in the radiation exposure of the public or of any plant or animal which is caused by the substance or article being subject to a process after the relevant start time.
- (3) Sub-paragraph (4) applies to a substance or article which—
- (a) is disposed of by burial (whether underground or otherwise) on premises in respect of which an environmental permit in respect of the radioactive substances activity in paragraph 11(2)(b) is held at the time of disposal,
  - (b) is disposed of in accordance with that permit, and
  - (c) is solid at the time of the disposal.
- (4) Where this sub-paragraph applies, the relevant start time is—

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- (a) where the environmental permit in sub-paragraph (3)(a) is surrendered, the time at which the surrender takes effect, or
- (b) where that permit is revoked and—
  - (i) regulation 23 applies to that permit, the time at which the regulator issues the certificate described in paragraph (4) or (6) of that regulation, or
  - (ii) regulation 23 does not apply to that permit, the time at which the revocation takes effect.
- (5) Sub-paragraph (6) applies to a substance or article (“A”) described in sub-paragraph (1)(b), where the substance or article (“B”) which contaminates it (directly or indirectly) is described in sub-paragraph (3).
- (6) Where this sub-paragraph applies, the relevant start time for A is the later of—
  - (a) the time at which A becomes contaminated, and
  - (b) the relevant start time for B.
- (7) In respect of a substance or article (“C”) to which sub-paragraphs (4) and (6) do not apply, the relevant start time is—
  - (a) where sub-paragraph (1)(a) applies to C, the time at which C is disposed of;
  - (b) where sub-paragraph (1)(b) applies to C, the time at which C becomes contaminated.

**Interpretation: radioactive substances activity**

**11.**—(1) Subject to paragraphs 13 and 14, “radioactive substances activity” means an activity described in sub-paragraph (2), (4), (5) or (6).

(2) A radioactive substances activity is carried on where a person uses premises for the purposes of an undertaking and that person—

- (a) except where sub-paragraph (5) applies, keeps or uses radioactive material on those premises,
- (b) disposes of radioactive waste on or from those premises, or
- (c) accumulates radioactive waste on those premises,

knowing or having reasonable grounds for believing the material or waste to be radioactive material or radioactive waste.

(3) For the purposes of sub-paragraph (2)(c), where—

- (a) radioactive material is produced, kept or used on any premises,
- (b) any substance arising from the production, keeping or use of that material is accumulated in a part of the premises appropriated for the purpose, and
- (c) that substance is retained there for a period of not less than 3 months,

that substance, unless the contrary is proved, is presumed to be radioactive waste.

(4) A radioactive substances activity is carried on where, in the course of a person carrying on an undertaking, that person—

- (a) receives radioactive waste for the purposes of disposing of that waste, and
- (b) knows or has reasonable grounds for believing the waste to be radioactive waste.

(5) A radioactive substances activity is carried on where a person keeps or uses mobile radioactive apparatus for—

- (a) testing, measuring or otherwise investigating any of the characteristics of substances or articles, or

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- (b) releasing quantities of radioactive material into the environment or introducing such material into organisms.
- (6) A radioactive substances activity is carried on where a person carries out intrusive investigation work or other excavation, construction or building work—
  - (a) to determine the suitability of any premises, or
  - (b) to enable the use of any premises,as a place that may be used wholly or substantially for underground disposal.
- (7) In sub-paragraph (6)—
  - “intrusive investigation work” means the drilling of boreholes into, or excavation of, sub-soil or rock to determine geological or hydrogeological conditions;
  - “underground disposal” means—
    - (a) the disposal of solid radioactive waste in an engineered facility, or in part of an engineered facility, which is beneath the surface of the ground, and
    - (b) where the natural environment which surrounds the facility acts, in combination with any engineered measures, to inhibit the transit of radionuclides from the facility to the surface,and does not include the disposal of radioactive waste in a facility which is beneath the surface of the ground only by virtue of the placing of rocks or soil above it.

#### **Discharge of functions: mobile radioactive apparatus**

**12.**—(1) In the case of an activity described in paragraph 11(5), if the principal place where the apparatus mentioned in that sub-paragraph is kept when not in use is in England or Wales, functions in relation to the activity are exercisable by the appropriate agency in whose area the principal place of keeping is.

(2) But sub-paragraph (1) does not apply to functions under regulations 36, 37, 38 and 42 (which are exercisable in relation to the activity in accordance with regulation 32(1)).

#### **Nuclear sites**

**13.**—(1) Paragraph 11(2)(a) does not apply to the activity carried on by a licensee of a nuclear site on any premises situated on that site at any time—

- (a) while a nuclear site licence is in force in respect of that site, and
- (b) after the revocation or surrender of such a licence but before the period of responsibility of the licensee has come to an end.

(2) In respect of any premises which—

- (a) are situated on a nuclear site, but
- (b) have ceased to be used for the purposes of an undertaking carried on by the licensee,

paragraph 11(2)(b) applies to those premises as if the premises were used for the purposes of an undertaking carried on by the licensee.

(3) Paragraph 11(2)(c) does not apply to the accumulation of radioactive waste on any premises situated on a nuclear site.

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## Vehicles, vessels and aircraft

14. In determining whether any radioactive material is kept or used on any premises, no account must be taken of any radioactive material kept or used in or on any railway vehicle, road vehicle, vessel or aircraft if—

- (a) the vehicle, vessel or aircraft is on the premises in the course of a journey, or
- (b) in the case of a vessel which is on those premises otherwise than in the normal course of a journey, the material is used in propelling the vessel or is kept in or on the vessel for use in propelling it.

## PART 3

### Tables of radionuclides and summation rules

**Table 1**

1.—(1) The Table 1 referred to in paragraph 4 of Part 2 (NORM industrial activities) is—

**Table 1**

#### Concentration of radionuclides: NORM industrial activities

<i>Radionuclide</i>	<i>Solid or relevant liquid concentration in becquerels per gram (Bq/g)</i>	<i>Any other liquid concentration in becquerels per litre (Bq/l)</i>	<i>Gaseous concentration in becquerels per cubic metre (Bq/m<sup>3</sup>)</i>
U-238sec M119	[ <sup>F263</sup> 1]	0.1	0.001
U-238+	5	10	0.01
U-234	5	10	0.01
Th-230	10	10	0.001
Ra-226+	[ <sup>F263</sup> 1]	1	0.01
Pb-210+	5	0.1	0.01
Po-210	5	0.1	0.01
U-235sec	1	0.1	0.0001
U-235+	5	10	0.01
Pa-231	5	1	0.001
Ac-227+	1	0.1	0.001
Th-232sec	[ <sup>F263</sup> 1]	0.1	0.001
Th-232	5	10	0.001
Ra-228+	1	0.1	0.01
Th-228+	[ <sup>F263</sup> 1]	1	0.001



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(2) The Table 1 summation rule in respect of column 2, 3 or 4 means the sum of the quotients A/B where—

- (a) “A” means the concentration of each radionuclide listed in column 1 of Table 1 that is present in the substance or article, and
- (b) “B” means the concentration of that radionuclide specified in column 2, 3 or 4 (as appropriate) of Table 1.

**Textual Amendments**

**F263** Figures in Sch. 23 Pt. 3 para. 1(1) Table 1 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 8**

**Marginal Citations**

**M119** For the meaning of ‘sec’ and ‘+’ in this Part, see paragraph 3.

**Table 2**

2.—(1) The Table 2 referred to in paragraph 5 of Part 2 (processed radionuclides of natural terrestrial or cosmic origin) and paragraph 6 of that Part (radionuclides not of natural terrestrial or cosmic origin) is—

**Table 2**

**Concentration of radionuclides**

<sup>F264</sup> Radionuclide	Concentration in becquerels per gram (Bq/g)
H-3	10 <sup>2</sup>
Be-7	10
C-14	10
F-18	10
Na-22	0.1
Na-24	1
Si-31	10 <sup>3</sup>
P-32	10 <sup>3</sup>
P-33	10 <sup>3</sup>
S-35	10 <sup>2</sup>
Cl-36	1
Cl-38	10
K-42	10 <sup>2</sup>
K-43	10
Ca-45	10 <sup>2</sup>

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$\text{I}^{F264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Ca-47	10
Sc-46	0.1
Sc-47	$10^2$
Sc-48	1
V-48	1
Cr-51	$10^2$
Mn-51	10
Mn-52	1
Mn-52m	10
Mn-53	$10^2$
Mn-54	0.1
Mn-56	10
Fe-52+	10
Fe-55	$10^3$
Fe-59	1
Co-55	10
Co-56	0.1
Co-57	1
Co-58	1
Co-58m	$10^4$
Co-60	0.1
Co-60m	$10^3$
Co-61	$10^2$
Co-62m	10
Ni-59	$10^2$
Ni-63	$10^2$
Ni-65	10
Cu-64	$10^2$
Zn-65	0.1
Zn-69	$10^3$
Zn-69m+	10
Ga-72	10

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Ge-71	10 <sup>4</sup>
As-73	10 <sup>3</sup>
As-74	10
As-76	10
As-77	10 <sup>3</sup>
Se-75	1
Br-82	1
Rb-86	10 <sup>2</sup>
Sr-85	1
Sr-85m	10 <sup>2</sup>
Sr-87m	10 <sup>2</sup>
Sr-89	10 <sup>3</sup>
Sr-90+	1
Sr-91+	10
Sr-92	10
Y-90	10 <sup>3</sup>
Y-91	10 <sup>2</sup>
Y-91m	10 <sup>2</sup>
Y-92	10 <sup>2</sup>
Y-93	10 <sup>2</sup>
Zr-93	10
Zr-95+	1
Zr-97+	10
Nb-93m	10
Nb-94	0.1
Nb-95	1
Nb-97+	10
Nb-98	10
Mo-90	10
Mo-93	10
Mo-99+	10
Mo-101+	10

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Tc-96	1
Tc-96m	$10^3$
Tc-97	10
Tc-97m	$10^2$
Tc-99	1
Tc-99m	$10^2$
Ru-97	10
Ru-103+	1
Ru-105+	10
Ru-106+	0.1
Rh-103m	$10^4$
Rh-105	$10^2$
Pd-103+	$10^3$
Pd-109+	$10^2$
Ag-105	1
Ag-108m+	0.1
Ag-110m+	0.1
Ag-111	$10^2$
Cd-109+	1
Cd-115+	10
Cd-115m+	$10^2$
In-111	10
In-113m	$10^2$
In-114m+	10
In-115m	$10^2$
Sn-113+	1
Sn-125	10
Sb-122	10
Sb-124	1
Sb-125+	0.1
Te-123m	1
Te-125m	$10^3$

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Te-127	10 <sup>3</sup>
Te-127m+	10
Te-129	10 <sup>2</sup>
Te-129m+	10
Te-131	10 <sup>2</sup>
Te-131m+	10
Te-132+	1
Te-133+	1
Te-133m+	1
Te-134	10
I-123	10 <sup>2</sup>
I-125	10 <sup>2</sup>
I-126	10
I-129	0.01
I-130	10
I-131+	1
I-132	10
I-133	10
I-134	10
I-135	10
Cs-129	10
Cs-131	10 <sup>3</sup>
Cs-132	10
Cs-134	0.1
Cs-134m	10 <sup>3</sup>
Cs-135	10 <sup>2</sup>
Cs-136	1
Cs-137+	1
Cs-138	10
Ba-131	10
Ba-140	1
La-140	1

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Ce-139	1
Ce-141	10 <sup>2</sup>
Ce-143	10
Ce-144+	10
Pr-142	10 <sup>2</sup>
Pr-143	10 <sup>3</sup>
Nd-147	10 <sup>2</sup>
Nd-149	10 <sup>2</sup>
Pm-147	10 <sup>3</sup>
Pm-149	10 <sup>3</sup>
Sm-151	10 <sup>3</sup>
Sm-153	10 <sup>2</sup>
Eu-152	0.1
Eu-152m	10 <sup>2</sup>
Eu-154	0.1
Eu-155	1
Gd-153	10
Gd-159	10 <sup>2</sup>
Tb-160	1
Dy-165	10 <sup>3</sup>
Dy-166	10 <sup>2</sup>
Ho-166	10 <sup>2</sup>
Er-169	10 <sup>3</sup>
Er-171	10 <sup>2</sup>
Tm-170	10 <sup>2</sup>
Tm-171	10 <sup>3</sup>
Yb-175	10 <sup>2</sup>
Lu-177	10 <sup>2</sup>
Hf-181	1
Ta-182	0.1
W-181	10

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
W-185	10 <sup>3</sup>
W-187	10
Re-186	10 <sup>3</sup>
Re-188	10 <sup>2</sup>
Os-185	1
Os-191	10 <sup>2</sup>
Os-191m	10 <sup>3</sup>
Os-193	10 <sup>2</sup>
Ir-190	1
Ir-192	1
Ir-194	10 <sup>2</sup>
Pt-191	10
Pt-193m	10 <sup>3</sup>
Pt-197	10 <sup>3</sup>
Pt-197m	10 <sup>2</sup>
Au-198	10
Au-199	10 <sup>2</sup>
Hg-197	10 <sup>2</sup>
Hg-197m	10 <sup>2</sup>
Hg-203	10
Tl-200	10
Tl-201	10 <sup>2</sup>
Tl-202	10
Tl-204	1
Pb-203	10
Pb-210+	0.01
Pb-212+	1
Bi-206	1
Bi-207	0.1
Bi-210	10
Bi-212+	1

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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Po-203	10
Po-205	10
Po-207	10
Po-210	0.01
At-211	10 <sup>3</sup>
Ra-223+	1
Ra-224+	1
Ra-225	10
Ra-226+	0.01
Ra-227	10 <sup>2</sup>
Ra-228+	0.01
Ac-227+	0.01
Ac-228	1
Th-226+	10 <sup>2</sup>
Th-227	1
Th-228+	0.1
Th-229+	0.1
Th-230	0.1
Th-231	10 <sup>2</sup>
Th-232	0.01
Th-232+	0.01
Th-232sec	0.01
Th-234+	10
Pa-230	10
Pa-231	0.01
Pa-233	10
U-230+	1
U-231	10 <sup>2</sup>
U-232+	0.1
U-233	1
U-234	1
U-235+	1
U-235sec	0.01



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$f^{264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
U-236	10
U-237	10 <sup>2</sup>
U-238+	1
U-238sec	0.01
U-239	10 <sup>2</sup>
U-240+	10 <sup>2</sup>
Np-237+	1
Np-239	10 <sup>2</sup>
Np-240	10
Pu-234	10 <sup>2</sup>
Pu-235	10 <sup>2</sup>
Pu-236	1
Pu-237	10 <sup>2</sup>
Pu-238	0.1
Pu-239	0.1
Pu-240	0.1
Pu-241	10
Pu-242	0.1
Pu-243	10 <sup>3</sup>
Pu-244+	0.1
Am-241	0.1
Am-242	10 <sup>3</sup>
Am-242m+	0.1
Am-243+	0.1
Cm-242	10
Cm-243	1
Cm-244	1
Cm-245	0.1
Cm-246	0.1
Cm-247+	0.1
Cm-248	0.1
Bk-249	10 <sup>2</sup>

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$\int^{F264}$ Radionuclide	Concentration in becquerels per gram (Bq/g)
Cf-246	10 <sup>3</sup>
Cf-248	1
Cf-249	0.1
Cf-250	1
Cf-251	0.1
Cf-252	1
Cf-253	10 <sup>2</sup>
Cf-253+	1
Cf-254	1
Es-253	10 <sup>2</sup>
Es-254+	0.1
Es-254m+	10
Fm-254	10 <sup>4</sup>
Fm-255	10 <sup>2</sup>
Any other solid or relevant liquid radionuclide that is not of natural terrestrial or cosmic origin	0.01 or that concentration which gives rise to a dose to a member of the public of 10 microsieverts per year calculated by reference to the International Atomic Energy Agency publication “Application of the Concepts of Exclusion, Exemption and Clearance”, IAEA Safety Standards Series No. RS-G-1.7.]

- (2) The Table 2 column 2 summation rule means the sum of the quotients A/B where—
- (a) “A” means the concentration of each radionuclide listed in column 1 of Table 2 that is present in the substance or article, and
  - (b) “B” means the concentration of that radionuclide specified in column 2 of Table 2.

**Textual Amendments**

**F264** Sch. 23 Pt. 3 para. 2(1) Table 2 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 9**

**References in Table 1 and Table 2 to + and sec**

3. Where any radionuclide carries the suffix “+” or “sec” in Table 1 or Table 2—
- (a) that radionuclide represents the parent radionuclide in secular equilibrium with the corresponding daughter radionuclides which are identified in column 2 of Table 3 in respect of that parent radionuclide, and

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- (b) a concentration value given in a table in this Part in respect of such a parent radionuclide is the value for the parent radionuclide alone, but already takes into account the daughter radionuclides present.

**Table 3**

4. The Table 3 referred to in paragraph 3 is—

**Table 3****Radionuclides in secular equilibrium**

<i>Parent radionuclide</i>	<i>Daughter radionuclides</i>
Fe-52+	Mn-52m
Zn-69m+	Zn-69
Sr-90+	Y-90
Sr-91+	Y-91m
Zr-95+	Nb-95m
Zr-97+	Nb-97m, Nb-97
Nb-97+	Nb-97m
Mo-99+	Tc-99m
Mo-101+	Tc-101
Ru-103+	Rh-103m
Ru-105+	Rh-105m
Ru-106+	Rh-106
Pd-103+	Rh-103m
Pd-109+	Ag-109m
Ag-108m+	Ag-108
Ag-110m+	Ag-110
Cd-109+	Ag-109m
Cd-115+	In-115m
Cd-115m+	In-115m
In-114m+	In-114
Sn-113+	In-113m
Sb-125+	Te-125m
Te-127m+	Te-127
Te-129m+	Te-129
Te-131m+	Te-131
Te-132+	I-132

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Te-133+	I-133, Xe-133m, Xe-133
Te-133m+	Te-133, I-133, Xe-133m, Xe-133
I-131+	Xe-131m
Cs-137+	Ba-137m
Ce-144+	Pr-144, Pr-144m
Pb-210+	Bi-210, Po-210
Pb-212+	Bi-212, Tl-208
Bi-212+	Tl-208
Ra-223+	Rn-219, Po-215, Pb-211, Bi-211, Tl-207
Ra-224+	Rn-220, Po-216, Pb-212, Bi-212, Tl-208
Ra-226+	Rn-222, Po-218, Pb-214, Bi-214, Po-214
Ra-228+	Ac-228
Ac-227+	Th-227, Fr-223, Ra-223, Rn-219, Po-215, Pb-211, Bi-211, Tl-207, Po-211
Th-226+	Ra-222, Rn-218, Po-214
Th-228+	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208
Th-229+	Ra-225, Ac-225, Fr-221, At-217, Bi-213, Tl-209, Pb-209
Th-232+	Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208
Th-232sec	Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Po-212, Tl-208
Th-234+	Pa-234m, Pa-234
U-230+	Th-226, Ra-222, Rn-218, Po-214
U-232+	Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208
U-235+	Th-231
U-235sec	Th-231, Pa-231, Ac-227, Th-227, Fr-223, Ra-223, Rn-219, Po-215, Pb-211, Bi-211, Tl-207, Po-211
U-238+	Th-234, Pa-234m, Pa-234
U-238sec	Th-234, Pa-234m, Pa-234, U-234, Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210
U-240+	Np-240m, Np-240
Np-237+	Pa-233
Pu-244+	U-240, Np-240m, Np-240

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Am-242m+	Np-238
Am-243+	Np-239
Cm-247+	Pu-243
Cf-253+	Cm-249
Es-254+	Bk-250
Es-254m+	Fm-254

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## PART 4

### The Basic Safety Standards Directive

#### SECTION 1

##### Exposures and doses

#### Optimisation and dose limits

1. In respect of a radioactive substances activity that relates to radioactive waste, the regulator must exercise its relevant functions to ensure that—

- (a) all exposures to ionising radiation of any member of the public and of the population as a whole resulting from the disposal of radioactive waste are kept as low as reasonably achievable, taking into account economic and social factors, and
- (b) the sum of the doses resulting from the exposure of any member of the public to ionising radiation does not exceed the dose limits set out in [F265 Article 12] of the Basic Safety Standards Directive subject to the exclusions set out in [F266 Article 5(c)] of that Directive.

#### Textual Amendments

**F265** Words in Sch. 23 Pt. 4 para. 1(b) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 11(a)**

**F266** Words in Sch. 23 Pt. 4 para. 1(b) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 11(b)**

#### Specific dose limits and calculation

2.—(1) In exercising those relevant functions in relation to the planning stage of radiation protection, the regulator must have regard to the following maximum doses to individuals which may result from a defined source—

- (a) 0.3 millisieverts per year from any source<sup>F267</sup> ..., or
- (b) 0.5 millisieverts per year from the discharges from any single site.

[F268](2) In exercising those relevant functions, the regulator must observe the requirements of the following provisions—

- (a) when estimating effective dose and equivalent dose—
  - (i) from external exposure, chapters 4 and 5 of International Commission on Radiological Protection Publication 116; and

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- (ii) from internal exposure, chapter 1 of International Commission on Radiological Protection Publication 119; and
- (b) in estimating population doses, Article 66 of the Basic Safety Standards Directive.]

**Textual Amendments**

- F267** Words in Sch. 23 Pt. 4 para. 2(1)(a) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 12(a)**
- F268** Sch. 23 Pt. 4 para. 2(2) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 12(b)**

*SECTION 2*

*Interventions*

**Radioactive waste: power of the Secretary of State to provide facilities for disposal or accumulation**

**3.—(1)** If it appears to the Secretary of State that adequate facilities are not available for the safe disposal or accumulation of radioactive waste, the Secretary of State may—

- (a) provide such facilities, or
- (b) make arrangements for their provision by such persons as the Secretary of State may think fit.

(2) Before exercising the power under sub-paragraph (1), the Secretary of State must consult with—

- (a) any local authority in whose area the facilities would be situated, and
- (b) such other public or local authorities (if any) as appear to the Secretary of State to be proper to be consulted.

(3) Reasonable charges for the use of any facilities provided under sub-paragraph (1) may be made by—

- (a) the Secretary of State, or
- (b) the person providing such facilities, unless the arrangements made by the Secretary of State with that person provide to the contrary.

**Radioactive waste: power of disposal by the regulator**

**4.—(1)** Sub-paragraph (2) applies if there is radioactive waste on any premises and the regulator is satisfied that the waste ought to be disposed of but that it is unlikely that the waste will be lawfully disposed of—

- (a) because the premises are unoccupied,
- (b) because the occupier is absent or insolvent, or
- (c) for any other reason.

(2) The regulator may dispose of the waste and recover any expenses it reasonably incurs in that disposal from—

- (a) the occupier of the premises;
- (b) if the premises are unoccupied, the owner of the premises.

(3) In sub-paragraph (2)—

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- (a) “owner” has the same meaning as in section 343 of the Public Health Act 1936 <sup>M120</sup>, and
- (b) the provisions of section 294 of that Act <sup>M121</sup> (which limits the liability of owners who are only agents or trustees) apply but as if reference in that section to a council recovering expenses under that Act were to the regulator recovering expenses under subparagraph (2).

#### Marginal Citations

**M120** 1936 c. 49.

**M121** Section 294 was modified, in relation to steps required to be taken by certain notices, by [S.I. 1990/1519](#), 1992/656 and 1492.

### <sup>F269</sup>SECTION 3

#### *Miscellaneous duties of the regulator*

#### Textual Amendments

**F269** Sch. 23 Pt. 4 Section 3 inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 13**

#### Inspection programmes

5. When establishing an inspection programme for the purposes of regulation 34(2) (periodic inspections of regulated facilities) in relation to radioactive substance activities, the regulator must take into account the potential magnitude and nature of the hazard associated with such activities, a general assessment of radiation protection issues in the activities, and the state of compliance with the requirements of these Regulations.

#### Inspection findings

6. Where a regulator makes an inspection of a regulated facility that is a radioactive substances activity, the regulator must—

- (a) record the findings of that inspection; and
- (b) communicate those findings to the operator of the regulated facility.

#### Radioactive waste: requirements to be imposed on permit holders

7.—(1) The regulator must require a person who holds an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) (disposing of waste) or (c) (accumulating waste) of Part 2 of this Schedule to—

- (a) achieve and maintain an optimal level of protection of members of the public;
- (b) accept into service adequate equipment and procedures for measuring and assessing exposure of members of the public and radioactive contamination of the environment;
- (c) check the effectiveness and maintenance of equipment as referred to in paragraph (b) and ensure the regular calibration of measuring instruments; and
- (d) seek advice from a radioactive waste adviser in the performance of the tasks referred to in paragraphs (a), (b) and (c).

[

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<sup>F270</sup>(1A) Paragraph (1)(d) does not apply in relation to waste that is a sealed source.]

[<sup>F271</sup>(2) In this paragraph—

“radioactive waste adviser” means an individual, or group of individuals, with the knowledge, training and experience needed to give radioactive waste management and environmental radiation protection advice in relation to radioactive waste in order to ensure the effective protection of members of the public, and whose competence in that respect is recognised by the regulator;

“sealed source” has the same meaning as in the Basic Safety Standards Directive.]

#### Textual Amendments

**F270** Sch. 23 Pt. 4 para. 7(1A) inserted (7.1.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), **regs. 2(1), 4(6)(a)**

**F271** Sch. 23 Pt. 4 para. 7(2) substituted (7.1.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), **regs. 2(1), 4(6)(b)**

### Dilution of radioactive material and radioactive waste

**8.** In exercising its relevant functions in relation to a radioactive substances activity, the regulator must observe the requirements of Article 30(4) of the Basic Safety Standards Directive.

### Monitoring of discharges

**9.—(1)** This paragraph applies where the regulator is exercising relevant functions in relation to a radioactive substances activity where there are radioactive discharges authorised by an environmental permit.

(2) The regulator must impose appropriate environmental permit conditions concerning—

- (a) the monitoring, or the evaluation, of radioactive airborne or aqueous discharges into the environment; and
- (b) the reporting to the regulator of the results of such monitoring or evaluation.

(3) For the purposes of sub-paragraph (2), where the regulator is exercising relevant functions in relation to a nuclear power station or nuclear reprocessing plant, the environmental permit conditions imposed must require the monitoring of radioactive discharges and reporting to the regulator of such information on radioactive discharges as the appropriate authority directs.]

## PART 5

[<sup>F272</sup>The control of high-activity and other sources]

#### Textual Amendments

**F272** Sch. 23 Pt. 5 heading substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 15**



**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## SECTION 1

### Security of sources

#### Interpretation

1. In this Part—

“high-activity or similar source” means—

- (a) a high-activity source, or
- (b) such other sealed source which, in the opinion of the regulator, is of a similar level of potential hazard to a high-activity source;

[<sup>F273</sup>“ high-activity source” means a sealed source for which the activity of the contained radionuclide is equal to or exceeds the relevant activity value laid down in Annex III of the Basic Safety Standards Directive;]

“orphan source” has the same meaning as in the [<sup>F274</sup>Basic Safety Standards Directive];

“sealed source” has the same meaning as in the [<sup>F274</sup>Basic Safety Standards Directive].

#### Textual Amendments

**F273** Words in Sch. 23 Pt. 5 para. 1 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\), reg. 1, Sch. para. 16\(a\)](#)

**F274** Words in Sch. 23 Pt. 5 para. 1 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\), reg. 1, Sch. para. 16\(b\)](#)

#### Site security: inspection

2.—(1) In exercising relevant functions in relation to a radioactive substances activity, the regulator must comply with sub-paragraph (3) where a high-activity or similar source is, or will be, kept, used, disposed of or accumulated on any premises.

(2) Sub-paragraph (1) does not apply where the premises are, or are part of, a nuclear site.

(3) In considering if the measures taken, or to be taken, by the operator ensure the adequate security of any premises, the regulator must where appropriate inspect those premises.

(4) Where the regulator inspects any premises under sub-paragraph (3), it may be accompanied by such other persons as are appropriate to assist it in assessing the measures.

(5) An operator must permit the regulator (and any person accompanying it) reasonable access to any premises the regulator wishes to inspect under sub-paragraph (3).

(6) If the operator fails to comply with sub-paragraph (5), the regulator may refuse the application or revoke the permit insofar as it relates to the sources referred to in sub-paragraph (1).

#### Site security: security measures and advice

3.—(1) In exercising relevant functions in relation to a radioactive substances activity, the regulator must comply with sub-paragraph (2) where a high-activity or similar source is, or will be, kept, used, disposed of or accumulated on any premises.

(2) The regulator—

- (a) must satisfy itself that there are in place measures concerning site security, including the security measures in sub-paragraph (3), as are appropriate to the source and premises in question,

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- (b) where it considers it appropriate to do so, must consult the police, security services or other appropriate persons on site security,
  - (c) must have regard to any advice given by them, if it is issued within such time as the regulator believes is reasonable before it exercises a relevant function, and
  - (d) must impose appropriate environmental permit conditions concerning site security.
- (3) The security measures referred to in sub-paragraph (2)(a) are—
- (a) measures to ensure the physical security of the premises, including the installation of alarm and detection systems, and the retaining of documentary evidence of those measures,
  - (b) measures, which are evidenced in writing—
    - (i) to prevent unauthorised access to, or loss or theft of, a high-activity or similar source,
    - (ii) to detect such matters, and
    - (iii) to review and enhance the physical security of the premises in response to any increased risk of unauthorised access, loss or theft,
  - (c) written procedures to ensure that before a person is authorised to have access to a high-activity or similar source—
    - (i) that person has passed checks to verify their identity, and
    - (ii) satisfactory written references have been obtained which confirm, as far as reasonably practicable, that there is no information to indicate that the person presents any security risk to the sources, and
  - (d) measures to keep secure, and prevent unauthorised access to, information relating to—
    - (i) a high-activity or similar source, and
    - (ii) the measures referred to in paragraphs (a), (b) and (c).

## SECTION 2

### *Advice and assistance in relation to orphan sources*

#### **Advice and assistance in respect of orphan sources**

- 4.—(1) The relevant person must ensure that specialised technical advice and assistance is promptly made available to persons who—
- (a) are not normally involved in operations subject to radiation protection requirements, and
  - (b) suspect the presence of an orphan source.
- (2) The relevant person must ensure that the primary aim of such advice and assistance is—
- (a) the safety of the source, and
  - (b) protecting the public and workers from radiation.
- (3) The relevant person means—
- (a) in relation to the protection of workers, the Secretary of State;
  - (b) in relation to the protection of the public (other than workers)—
    - (i) in England, the Secretary of State;
    - (ii) in Wales, the Welsh Ministers.

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### SECTION 3

*Exercise of relevant functions and matters in relation to <sup>F275</sup> ... sources*

#### Textual Amendments

**F275** Word in Sch. 23 Pt. 5 Section 3 heading omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 17**

#### General

[<sup>F276</sup>5. In exercising relevant functions in relation to a radioactive substances activity, the regulator must comply with Articles 85 to 89 and 91 of the Basic Safety Standards Directive.]

#### Textual Amendments

**F276** Sch. 23 Pt. 5 para. 5 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 18**

#### Records and inspections

[<sup>F277</sup>6. In relation to a high-activity source, the regulator must keep records of those matters—  
(a) required by Article 90 of the Basic Safety Standards Directive, and  
(b) notified to it under Article 91(1) of that Directive.]

#### Textual Amendments

**F277** Sch. 23 Pt. 5 para. 6 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 19**

#### Training and information

<sup>F278</sup>7. ....

#### Textual Amendments

**F278** Sch. 23 Pt. 5 para. 7 omitted (1.1.2018) by [The Ionising Radiations Regulations 2017 \(S.I. 2017/1075\)](#), reg. 1, Sch. 9 para. 17 (with regs. 2(5), 3, Sch. 8)

#### Orphan sources

8.—(1) The regulator must—  
(a) be prepared, or have made provision (including the assignment of responsibilities), to [<sup>F279</sup>control and] recover any orphan source, and  
(b) have drawn up appropriate response plans and measures.  
(2) The regulator may recover any expenses reasonably incurred by it in the recovery and disposal of an orphan source from—  
(a) the person carrying on the radioactive substances activity involving that source, or

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- (b) the occupier or owner of the premises where the source is located.
- (3) In relation to sub-paragraph (2)—
  - (a) “owner” has the same meaning as in section 343 of the Public Health Act 1936, and
  - (b) the provisions of section 294 of that Act (which limits the liability of owners who are only agents or trustees) apply but as if reference in that section to a council recovering expenses under that Act were to the regulator recovering expenses under sub-paragraph (2).

#### Textual Amendments

**F279** Words in Sch. 23 Pt. 5 para. 8(1)(a) inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 20**

## PART 6

### Radioactive substances activity exemptions

#### SECTION 1

##### General

#### Interpretation

##### 1. In this Part—

“Ba-137m eluting source” means a source which consists of Cs-137 in a sealed container which is designed and constructed to allow the elution of Ba-137m, and which is radioactive material or radioactive waste solely because of that Cs-137;

“Class A gaseous tritium light device” means a gaseous tritium light device where the activity of the device does not exceed  $2 \times 10^{10}$  Bq of tritium;

“Class B gaseous tritium light device” means a gaseous tritium light device which is installed or intended to be installed on premises and where the activity—

- (a) in each sealed container in the device does not exceed  $8 \times 10^{10}$  Bq of tritium, and
- (b) of the device does not exceed  $1 \times 10^{12}$  Bq of tritium;

“Class C gaseous tritium light device” means a gaseous tritium light device installed or intended to be installed—

- (a) in a vessel or aircraft, or
- (b) in a vehicle or other equipment used or intended to be used by the armed forces of the Crown;

“disposal permit” means—

- (a) an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) of Part 2 of this Schedule, or
- (b) an authorisation under the 1993 Act to dispose of radioactive waste held in respect of premises situated in Northern Ireland or Scotland;

“electrodeposited source” means an article where radionuclides are electrodeposited onto a metal substrate and which is radioactive material or radioactive waste solely because it contains Ni-63 or Fe-55;

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“gaseous tritium light device” means a sealed source in a device which is an illuminant, instrument, sign or indicator which—

- (a) incorporates tritium in one or more sealed containers constructed to prevent dispersion of that tritium in normal use, and
- (b) is radioactive material solely because it contains that tritium;

[<sup>F280</sup>“high-activity or similar source” means—

- (a) a high-activity source, or
- (b) such other sealed source which, in the opinion of the regulator, is of a similar level of potential hazard to a high-activity source;

“high-activity source” means a sealed source for which the activity of the contained radionuclide is equal to or exceeds the relevant activity value laid down in Annex III of the Basic Safety Standards Directive;]

“luminised article” means an article which is made wholly or partly from a luminescent substance in the form of a film or a paint and which—

- (a) is radioactive material or radioactive waste solely because it contains Pm-147 or H-3, and
- (b) is not a sealed source;

“management”, in respect of waste, means—

- (a) the preparation by checking, cleaning or repairing that waste for its re-use without further processing,
- (b) the recovery of that waste,
- (c) the disposal of that waste, or
- (d) the application of any treatment process to that waste which is preparatory to the recovery or disposal of it,

and cognate expressions shall be construed accordingly;

“relevant river” means a river or a part of a river which—

- (a) is not a part of the sea, and
- (b) at the place and time of any disposal into it of aqueous radioactive waste from a sewage disposal works or directly from premises, has a flow-rate which is not less than  $1\text{m}^3\text{s}^{-1}$ ;

“relevant sewer” means—

- (a) a public sewer, or
- (b) a disposal main which leads to a sewage disposal works that—
  - (i) has the capacity to handle a minimum of  $100\text{m}^3$  of effluent per day, and
  - (ii) discharges treated effluent only to the sea or to a relevant river,

and “public sewer”, “disposal main”, “sewage disposal works” and “effluent” have the same meaning as in the Water Industry Act 1991 <sup>M122</sup>;

“relevant standard conditions” has the meaning given in paragraph 10;

“sea” includes any area submerged at mean high water springs and also includes, so far as the tide flows at mean high water springs, an estuary or arm of the sea and the waters of any channel, creek, bay or river;

[<sup>F281</sup>“sealed source” has the same meaning as in the Basic Safety Standards Directive, excluding such a source where it is an electrodeposited source or a tritium foil source;]

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“stored in transit” means the storage in the course of transit of radioactive material or radioactive waste but does not include any storage of such material or waste where it is removed from its container;

“Table 4”, [<sup>F282</sup>“Table 4A”,] “Table 5”, “Table 6”, “Table 7” or “Table 8” means the table with that number in this Part;

“a tritium foil source” means an article which—

- (a) has a mechanically tough surface into which tritium is incorporated, and
- (b) is radioactive material or radioactive waste solely because of that tritium;

“uranium or thorium compound” means a substance or article which is radioactive material or radioactive waste solely because it is or contains metallic uranium or thorium or prepared compounds of uranium or thorium, and in respect of which metal or compound the proportion of—

- (a) U-235 in the uranium it contains is no more than 0.72% by mass, and
- (b) any isotope of thorium it contains is present in the isotopic proportions found in nature;

“waste permitted person” means, in relation to the radioactive waste where the term appears, a person who holds—

- (a) an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) or (c) of Part 2 of this Schedule, or
- (b) in respect of premises in Scotland or Northern Ireland, an authorisation under section 13 or 14 of the 1993 Act;

“week” means any period of 7 consecutive days;

“year” means a calendar year.

#### Textual Amendments

- F280** Words in Sch. 23 Pt. 6 para. 1 inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 22(a)**
- F281** Words in Sch. 23 Pt. 6 para. 1 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 22(b)**
- F282** Words in Sch. 23 Pt. 6 para. 1 inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 22(c)**

#### Marginal Citations

- M122** 1991 c. 56; the definition of “public sewer” was amended by section 99(6) of the [Water Act 2003 \(c. 37\)](#).

#### Interpretation: NORM

[<sup>F283</sup>2.—(1) In this Part “NORM waste” means a substance or article which—

- (a) is solid radioactive waste under—
  - (i) paragraph 4 of Part 2 of this Schedule (NORM industrial activities); or
  - (ii) paragraph 5 of that Part (processed radionuclides of natural terrestrial or cosmic origin) where the waste arises from the remediation of land contaminated by radium and the contamination occurred prior to 13 May 2000;
- (b) contains one or more of the radionuclides which are listed in column 1 of Table 4A;
- (c) has a concentration of radioactivity that does not exceed the value specified in column 5 of Table 4A in respect of that radionuclide; and

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(d) is not waste to which sub-paragraph (3) applies.

(2) In this Part—

“type 1 NORM waste” means NORM waste which—

(a) has a concentration of radioactivity that does not exceed the value specified in column 2 of Table 4A; and

(b) is not waste to which sub-paragraph (4) applies;

“type 2 NORM waste” means NORM waste which has a concentration of radioactivity that exceeds the value specified in column 2 of Table 4A.

(3) This sub-paragraph applies to waste where, prior to the disposal of that waste, a person has diluted it with the intention of ensuring that the concentration of radioactivity does not exceed the value specified in column 5 of Table 4A.

(4) This sub-paragraph applies to waste where, prior to the disposal of that waste, a person has diluted it with the intention of ensuring that the concentration of radioactivity does not exceed the value specified in column 2 of Table 4A.]

#### Textual Amendments

**F283** Sch. 23 Pt. 6 para. 2 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 23**

## SECTION 2

### *Exemption for keeping and using radioactive material and accumulating radioactive waste*

#### **Exemption for keeping and using radioactive material**

**3.—**(1) A person (“A”) is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(a) of Part 2 of this Schedule in respect of—

(a) subject to sub-paragraph (2), the radioactive material described in paragraph 5, where A complies with the relevant standard conditions and—

(i) in respect of radioactive material described in paragraph 5(1)(a), the condition in paragraph 6(1), and

(ii) in respect of radioactive material described in paragraph 5(1)(b), the condition in paragraph 6(2), or

(b) radioactive material stored in transit.

(2) A is not exempt from the requirement for an environmental permit under sub-paragraph (1) (a) in respect of a high activity source where A takes possession of it.

#### **Exemption for accumulating radioactive waste**

**4.—**(1) This paragraph applies to the following radioactive substances activities—

(a) the activity described in paragraph 11(2)(c) of Part 2 of this Schedule (“Activity A”), and

(b) the activity described in paragraph 11(4) of Part 2 of this Schedule (“Activity B”).

(2) In this paragraph, “paragraph 5 waste” means radioactive waste described in paragraph 5.

(3) A person (“A”) is exempt from the requirement for an environmental permit to carry on Activity A or B, in respect of radioactive waste which is stored in transit.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(4) Subject to sub-paragraph (5), a person (“B”) is exempt from the requirement for an environmental permit to carry on Activity A or B in respect of paragraph 5 waste where—

- (a) B receives that waste for accumulation on premises (with a view to its subsequent management by B on those premises),
- (b) in respect of those premises B manages substantial quantities of waste which is not radioactive waste, and
- (c) the management of the radioactive waste will be completed by B as soon as is reasonably practicable, with the radioactive waste dispersed in non-radioactive waste.

(5) B is not exempt under sub-paragraph (4) from the requirement for an environmental permit to carry on Activity B where the waste received by B is or contains a high-activity source.

(6) A person (“C”) is exempt from the requirement for an environmental permit to carry on Activity A in respect of paragraph 5 waste, where C complies with the relevant standard conditions and—

- (a) in respect of radioactive waste described in paragraph 5(1)(a), the condition in paragraph 6(1), and
- (b) in respect of radioactive waste described in paragraph 5(1)(b), the condition in paragraph 6(2).

(7) A person (“D”) is exempt from the requirement for an environmental permit to carry on Activity A in respect of radioactive waste which is a sealed source, an electrodeposited source or a tritium foil source which—

- (a) contains a quantity of radionuclides which exceeds the value specified in column 2 of Table 4 in respect of the relevant type of source,
- (b) immediately before it became radioactive waste, was radioactive material in the form of a sealed source, an electrodeposited source or a tritium foil source (as appropriate), and
- (c) has not been received by D for the purpose of D disposing of it,

where D complies with the relevant standard conditions.

[<sup>F284</sup>(8) D is not exempt under sub-paragraph (7) from the requirement for an environmental permit where the waste accumulated is or contains a high-activity or similar source.]

#### Textual Amendments

**F284** Sch. 23 Pt. 6 para. 4(8) inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 24**

#### Radioactive substances exempted under paragraphs 3 and 4

5.—(1) Subject to sub-paragraph (2), paragraphs 3(1)(a) and 4(4) and (6) apply to—

- (a) a substance or article described in an entry in column 1 of Table 4 which contains a quantity of radionuclides that does not exceed the value specified in column 2 of Table 4 in respect of that substance or article, or
- (b) any substance or article which is not described in an entry in column 1 of Table 4.

(2) Sub-paragraph (1) does not apply to NORM waste<sup>F285</sup>....



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### Textual Amendments

**F285** Words in Sch. 23 Pt. 6 para. 5(2) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 25**

### Conditions in respect of the total quantity or concentration of radioactive substances on any premises

6.—(1) The condition referred to in paragraphs 3(1)(a)(i) and 4(6)(a) is that, in respect of the total amount of a substance or article described in paragraph 5(1)(a) (including any mobile radioactive apparatus) on the premises, the quantity of radionuclides must not exceed the value specified for that substance or article in column 3 of Table 4.

(2) The condition referred to in paragraphs 3(1)(a)(ii) and 4(6)(b) in respect of a substance or article described in paragraph 5(1)(b) is that—

- (a) in respect of the total amount of such substances and articles on the premises, the quantity of radioactivity does not exceed the value specified in column 2 of Table 5, or
- (b) no such substance or article on the premises contains a concentration of radioactivity that exceeds the value specified in column 3 of Table 5.

### Exemption for accumulating NORM waste

7.—<sup>F286</sup>(1) This paragraph applies to the following radioactive substances activities—

- (a) the activity described in paragraph 11(2)(c) of Part 2 of this Schedule (“Activity A”);
- (b) the activity described in paragraph 11(4) of Part 2 of this Schedule (“Activity B”)]

(2) <sup>F287</sup>...A person (“A”) is exempt from the requirement for an environmental permit to carry on Activity A or Activity B in respect of [<sup>F288</sup>NORM waste], where another person (“B”) transfers that waste to A—

- (a) in accordance with—
  - (i) a disposal permit held by B, or
  - (ii) an exemption from holding such a permit that applied to B in respect of the transfer to A, and
- (b) for the purpose of its accumulation by A with a view to its subsequent management by A on the premises on which it is received by A.

(3) <sup>F289</sup>...A person (“C”) is exempt from the requirement for an environmental permit to carry on Activity A in respect of [<sup>F290</sup>NORM waste] where C complies with the relevant standard conditions.

<sup>F291</sup>(4) .....

<sup>F292</sup>(5) .....

### Textual Amendments

**F286** Sch. 23 Pt. 6 para. 7(1) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 26(a)**

**F287** Words in Sch. 23 Pt. 6 para. 7(2) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 26(b)(i)**

**F288** Words in Sch. 23 Pt. 6 para. 7(2) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 26(b)(ii)**

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- F289** Words in Sch. 23 Pt. 6 para. 7(3) omitted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), reg. 1, **Sch. para. 26(b)(i)**
- F290** Words in Sch. 23 Pt. 6 para. 7(3) substituted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), reg. 1, **Sch. para. 26(b)(ii)**
- F291** Sch. 23 Pt. 6 para. 7(4) omitted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), reg. 1, **Sch. para. 26(c)**
- F292** Sch. 23 Pt. 6 para. 7(5) omitted (2.5.2018) by The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018 (S.I. 2018/428), reg. 1, **Sch. para. 26(c)**

### SECTION 3

#### *Exemption for keeping or using mobile radioactive apparatus*

#### **Exemption for keeping or using mobile radioactive apparatus**

**8.—(1)** A person (“A”) is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(5) of Part 2 of this Schedule in respect of—

- (a) a mobile radioactive apparatus described in an entry in column 1 of Table 4 where—
    - (i) that apparatus contains a quantity of radionuclides that does not exceed the value specified in column 2 of Table 4 in respect of an apparatus of that description, and
    - (ii) A complies with the conditions in sub-paragraph (2), or
  - (b) mobile radioactive apparatus stored in transit.
- (2) The conditions in this sub-paragraph are that A must—
- (a) ensure that in relation to the total amount of all such mobile radioactive apparatus that A holds, the quantity of radionuclides does not exceed the value specified, in respect of an apparatus of that description, in column 3 of Table 4, and
  - (b) comply with the relevant standard conditions.

### SECTION 4

#### *Relevant standard conditions*

#### **Interpretation of this Section**

**9.** In this Section, “radioactive substances” means radioactive material, mobile radioactive apparatus and radioactive waste, and “exempt radioactive substances” means radioactive substances in respect of which an exemption in Section 2 or 3 of this Part applies.

#### **Relevant standard conditions**

**10.—(1)** Reference to the relevant standard conditions in Sections 1 to 3 of this Part, means in respect of the exemption provided for in—

- (a) paragraph 3(1)(a), the conditions in paragraphs 11 and 12;
- (b) paragraph 4(6), 4(7) or 7(3), the conditions in paragraphs 11, 12 and 14;
- (c) paragraph 8(1)(a), the conditions in paragraphs 11 and 13.

(2) A condition in paragraph 11, 12 or 13 does not apply in respect of an exemption in Section 2 or 3 of this Part unless that condition is a relevant condition in respect of that exemption.

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## General conditions

11. A person (“A”) to whom the conditions in this paragraph apply must—
- (a) keep an adequate record of any exempt radioactive substances which A holds, and—
    - (i) in respect of exempt radioactive substances which are mobile radioactive apparatus, the locations at which they are kept or used;
    - (ii) in respect of other exempt radioactive substances, the location within the premises where A holds them,
  - (b) ensure that where reasonably practicable exempt radioactive substances or the containers of such radioactive substances, are marked or labelled as radioactive,
  - (c) in respect of exempt radioactive substances which are sealed sources, electrodeposited sources or tritium foil sources, not modify or mutilate those sources or cause a loss of containment such that radioactive material or radioactive waste may be released outside the source,
  - (d) allow the regulator access to such records or such premises as the regulator may request in order to determine that all of the conditions in respect of the relevant exemption are complied with,
  - (e) hold the exempt radioactive substances safely and securely to prevent, so far as reasonably practicable—
    - (i) accidental removal, loss or theft from the premises where they are held, or
    - (ii) loss of containment, and
  - (f) in respect of exempt radioactive substances in a container—
    - (i) not modify or mutilate that container, and
    - (ii) prevent any uncontrolled or unintended release of radioactive material or radioactive waste from the container.

## Loss or theft conditions

12.—(1) Subject to sub-paragraph (2), in the event of an incident of loss or theft (or suspected loss or theft) of exempt radioactive substances (except mobile radioactive apparatus) from the premises where they are held, a person to whom the condition in this paragraph applies must—

- (a) notify the incident to the regulator as soon as reasonably practicable, and
- (b) include in that notification the details of any other incidents of loss or theft (or suspected loss or theft) of any radioactive substances from those premises over the 12 months preceding the incident being notified.

(2) In respect of an incident described in sub-paragraph (1), a notification to the regulator is not required where in respect of the aggregated total amount of exempt radioactive substances (excluding mobile radioactive apparatus) lost or stolen (or suspected to have been lost or stolen) from the premises in the incident and in all other such incidents in the 12 months preceding it, the total quantity of radioactivity does not exceed the value that is ten times the value in column 2 of Table 5.

## Loss or theft conditions: mobile radioactive apparatus

13.—(1) Subject to sub-paragraph (2), in the event of an incident of loss or theft (or suspected loss or theft) of mobile radioactive apparatus from a person (“A”) to whom the condition in this paragraph applies, A must—

- (a) notify the incident to the regulator as soon as reasonably practicable, and

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- (b) include in that notification the details of any other incidents of loss or theft (or suspected loss or theft) of any mobile radioactive apparatus from A over the 12 months preceding the incident being notified.

(2) In respect of an incident described in sub-paragraph (1), a notification to the regulator is not required where in respect of the aggregated total amount of mobile radioactive apparatus lost or stolen (or suspected to have been lost or stolen) from A in the incident and in all other such incidents in the 12 months preceding it, the total quantity of radioactivity does not exceed the value that is ten times the value in column 2 of Table 5.

#### **Condition to dispose of accumulated waste**

**14.** A person to whom the condition in this paragraph applies must dispose of the radioactive waste which is the subject of the exemption to which this condition applies—

- (a) as soon as reasonably practicable after it has become waste, and
- (b) in the case of such waste where it is a sealed source, a tritium foil source or an electrodeposited source, in any event within 26 weeks after it has become waste unless the regulator advises in writing that a longer period of accumulation is allowed.

### *SECTION 5*

#### *Exemption for disposing of solid radioactive waste*

#### **Exemption for receiving and disposing of solid radioactive waste**

**15.—**(1) This paragraph applies to the following radioactive substances activities—

- (a) the activity described in paragraph 11(2)(b) of Part 2 of this Schedule (“Activity A”);
- (b) the activity described in paragraph 11(4) of Part 2 of this Schedule (“Activity B”).

(2) A person (“A”) is exempt from the requirement for an environmental permit to carry on Activity A or Activity B in respect of solid radioactive waste described in paragraph 16(1)(a) where—

- (a) A receives the waste on premises for the purpose of it being managed by A on those premises,
- (b) in respect of those premises A manages substantial quantities of waste which is not radioactive waste, and
- (c) the radioactive waste will be disposed of by A as soon as is reasonably practicable with the radioactive waste dispersed in non-radioactive waste.

(3) A person (“B”) is exempt from the requirement for an environmental permit to carry on Activity A in respect of solid radioactive waste described in paragraph 16(1) where—

- (a) in respect of a sealed source, an electrodeposited source or a tritium foil source, B complies with the conditions in paragraph 17(2), and
- (b) in respect of any other waste described in paragraph 16(1)(a), B complies with the conditions in paragraph 17(1) and (2).

#### **Solid radioactive waste**

**16.—**(1) Solid radioactive waste referred to in paragraph 15 means—

- [<sup>F293</sup>(a) subject to sub-paragraph (2)—

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- (i) solid radioactive waste described in an entry in column 1 of Table 6 which does not contain a concentration of radionuclides that exceeds the value specified in column 2 of that table in respect of that kind of waste, or
- (ii) a broken or damaged individual sealed source of the type described in the fourth entry in Table 6 (individual sealed sources which are solely radioactive waste because they contain tritium), which would not have exceeded the value specified in column 2 when the source was intact, or]
- (b) a sealed source, an electrodeposited source or a tritium foil source which is not described in paragraph (a).
- (2) Sub-paragraph (1)(a) does not apply to waste—
  - (a) where, prior to the disposal of that waste, a person has diluted it with the intention of ensuring that sub-paragraph (1)(a) is met, or
  - (b) which is NORM waste<sup>F294</sup> ....

#### Textual Amendments

**F293** Sch. 23 Pt. 6 para. 16(1)(a) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 27\(a\)](#)

**F294** Words in Sch. 23 Pt. 6 para. 16(2)(b) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 27\(b\)](#)

#### Conditions in respect of solid radioactive waste

17.—(1) The condition referred to in paragraph 15(3)(b) is that B must ensure that, in respect of the total amount of a waste to which this condition applies that is disposed of on or from the premises, the quantity of radioactivity which that waste contains must not exceed the value specified in column 3 of Table 6 in respect of that waste during the period stated in that column.

- (2) The conditions referred to in paragraph 15(3)(a) and (b) are that B must—
  - (a) keep an adequate record of the solid radioactive waste which B disposes of on or from any premises under that paragraph,
  - (b) dispose of the waste by any of the routes described in sub-paragraph (3),
  - (c) where the disposal route in sub-paragraph (3)(a) is used, ensure that where reasonably practicable any marking or labelling of the waste or its container is removed before the person disposes of that waste,
  - [<sup>F295</sup>(d) where the waste is a high-activity or similar source, notify the details of the disposal to the regulator within 14 days of the disposal (including, for a high-activity source, the information required by Annex XIV of the Basic Safety Standards Directive), in such form as may be required by the regulator, and]
  - (e) allow the regulator access to such records or such premises as the regulator may request in order to determine that all of the conditions that apply in respect of the relevant exemption in paragraph 15(3) are complied with.
- (3) The routes referred to in sub-paragraph (2)(b) are that the waste is transferred to—
  - (a) subject to sub-paragraph (4), a person who manages substantial quantities of non-radioactive waste and where the radioactive waste will be so managed with the radioactive waste dispersed in non-radioactive waste,
  - (b) a waste permitted person, or

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- (c) where the waste is a sealed source, an electrodeposited source or a tritium foil source, to a licensee of a nuclear site or to a person who is situated in another country and who is lawfully entitled to receive such waste.
- (4) The route in sub-paragraph (3)(a) does not apply in respect of waste—
  - (a) described in paragraph 16(1)(b), or
  - (b) which is described in paragraph 16(1)(a) and which is a sealed source, an electrodeposited source or a tritium foil source, where in respect of the total amount of such a source which is disposed of on or from the premises under paragraph 15(3), the quantity of radioactivity which that waste contains exceeds the value specified in column 3 of Table 6 in respect of that source during the period stated in that column.

#### Textual Amendments

**F295** Sch. 23 Pt. 6 para. 17(2)(d) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 28**

## SECTION 6

### *Exemption for disposing of NORM waste*

#### **Exemption for receiving and disposing of NORM waste**

**18.**—<sup>F296</sup>(1) This paragraph applies to the following radioactive substances activities carried on in respect of NORM waste—

- (a) the activity described in paragraph 11(2)(b) of Part 2 of this Schedule (“Activity A”); and
- (b) the activity described in paragraph 11(4) of Part 2 of this Schedule (“Activity B”).]

(2) <sup>F297</sup>...A person (“A”) is exempt from the requirement for an environmental permit to carry on Activity A or Activity B in respect of <sup>F298</sup>...NORM waste where another person (“B”) transfers that waste to A—

- (a) in accordance with—
  - (i) a disposal permit held by B, or
  - (ii) an exemption from holding such a permit that applied to B in respect of the transfer to A, and
- (b) for the purpose of its disposal by A on the premises on which A receives it.

(3) Where a person (“C”) disposes of—

- (a) type 1 NORM waste on or from premises, sub-paragraph (4) applies to C, or
- (b) type 2 NORM waste on or from premises, sub-paragraph (5) applies to C.

(4) C is exempt from the requirement for an environmental permit to carry on Activity A in respect of type 1 NORM waste where in relation to the total amount of such waste disposed of on or from the premises by C per year—

- (a) the quantity of radionuclides does not exceed [<sup>F299</sup>the value specified in column 3 of Table 4A], and C complies with the conditions in paragraph 19(1), or
- (b) <sup>F300</sup>...The quantity of radionuclides exceeds [<sup>F299</sup>the value specified in column 3 of Table 4A], and C complies with—
  - (i) the conditions in paragraph 19(1), and

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- (ii) where C intends to dispose of the waste by one of the methods in paragraph 19(2)(a), the conditions in paragraph 19(3).

(5) <sup>F301</sup>...C is exempt from the requirement for an environmental permit to carry on Activity A in respect of type 2 NORM waste where C complies with the conditions in paragraph 19(1) and (3).

<sup>F302</sup>(6) .....

<sup>F303</sup>(7) .....

**Textual Amendments**

- F296** Sch. 23 Pt. 6 para. 18(1) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(a)**
- F297** Words in Sch. 23 Pt. 6 para. 18(2) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(b)(i)**
- F298** Words in Sch. 23 Pt. 6 para. 18(2) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(b)(ii)**
- F299** Words in Sch. 23 Pt. 6 para. 18(4) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(c)(i)**
- F300** Words in Sch. 23 Pt. 6 para. 18(4) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(c)(ii)**
- F301** Words in Sch. 23 Pt. 6 para. 18(5) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(d)**
- F302** Sch. 23 Pt. 6 para. 18(6) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(e)**
- F303** Sch. 23 Pt. 6 para. 18(7) omitted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 29(e)**

**[<sup>F304</sup>Exemption for disposing of gaseous NORM waste from oil and gas production**

**18A.** A person is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) (disposing of waste) of Part 2 of this Schedule where the only radioactive waste disposed of is gaseous NORM waste released in the production of oil and gas.]

**Textual Amendments**

- F304** Sch. 23 Pt. 6 para. 18A inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 30**

**Conditions in respect of NORM waste**

**19.—**(1) The conditions referred to in the exemptions in paragraph 18(4)(a) and (b)(i) and (5) are that C must—

- (a) keep an adequate record of the NORM waste which C disposes of under those exemptions,
- (b) dispose of the waste by any of the methods described in sub-paragraph (2),
- (c) where the disposal method in sub-paragraph (2)(a) or (b) is used, ensure that where reasonably practicable any marking or labelling of the waste or its container is removed before C disposes of that waste, and

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- (d) allow the regulator access to such records or such premises as the regulator may request in order to determine that all of the conditions that apply to C in respect of the relevant exemption in that paragraph are complied with.
- (2) The methods referred to in sub-paragraph (1)(b) are that the waste is disposed of—
  - (a) subject to sub-paragraph (3) where it applies, by burial in landfill or by the transfer of the waste to a person for the purpose of—
    - (i) the burial in landfill of the waste, or
    - (ii) the application of a treatment process to the waste which is preparatory to the burial in landfill of that waste,
  - (b) by incineration (or transfer to a person for such incineration or treatment which is preparatory to the incineration of the waste), but not in respect of—
    - (i) type 1 NORM waste, where in respect of the total amount of that waste that is incinerated (or transferred to a person for preparation or incineration) per year the quantity of radionuclides in the total amount of that waste exceeds [<sup>F305</sup>the value in column 4 of Table 4A], or
    - (ii) type 2 NORM waste, or
  - (c) by transfer to a waste permitted person.
- (3) The conditions referred to in paragraph 18(4)(b)(ii) and (5) are that C must—
  - (a) make a written radiological assessment of the reasonably foreseeable pathways for the exposure of the public and workers to radiation in respect of—
    - (i) the application of any treatment process to the waste which is preparatory to its burial in landfill, at the place of that treatment, and
    - (ii) the burial in landfill of that waste, at the place of disposal,
  - (b) be satisfied that the assessment demonstrates that radiation doses are not expected to exceed—
    - (i) 1 millisievert per year to any worker at the place of treatment or disposal, and
    - (ii) 300 microsievert per year to any member of the public,
  - (c) provide that assessment to the regulator at least 28 days before the first disposal is made, and
  - (d) not dispose of that waste (or continue to do so) if the regulator objects in writing to that assessment.

#### Textual Amendments

**F305** Words in Sch. 23 Pt. 6 para. 19(2)(b)(i) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 31](#)

## SECTION 7

### *Exemption for disposing of aqueous radioactive waste*

#### **Exemption for disposing of aqueous radioactive waste in Table 6**

**20.**—(1) Subject to sub-paragraph (2), a person (“A”) is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b)



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of Part 2 of this Schedule in respect of aqueous radioactive waste described in an entry in column 1 of Table 6, where A complies with the conditions in sub-paragraph (3).

(2) A is not exempt under sub-paragraph (1) where the person who generated that waste did not minimise the quantity of radionuclides generated as waste to the extent reasonably practicable.

(3) The conditions referred to in sub-paragraph (1) are that, in respect of the waste described in that sub-paragraph, A must—

- (a) ensure that in respect of the total amount of that waste that is disposed of on or from the premises in a year, the quantity of radioactivity which that waste contains does not exceed the value specified in column 3 of Table 6 in respect of that waste,
- (b) dispose of that waste to a relevant sewer or to a waste permitted person,
- (c) keep an adequate record of that waste which A disposes of on or from the premises, and
- (d) allow the regulator access to such records or such premises as the regulator may request in order to determine that the preceding conditions in this sub-paragraph are complied with.

### **Exemption for disposing of other aqueous radioactive waste**

**21.**—(1) Subject to sub-paragraph (2), a person (“A”) is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) of Part 2 of this Schedule in respect of aqueous radioactive waste described in sub-paragraph (3) where A disposes of that waste in accordance with the conditions in paragraph 22(1).

(2) A is not exempt under sub-paragraph (1) in respect of premises, where A holds an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) of Part 2 of this Schedule for the disposal of aqueous radioactive waste on or from those premises.

(3) Subject to sub-paragraph (4), the waste referred to in sub-paragraph (1) is aqueous radioactive waste—

- (a) which is not described in an entry in column 1 of Table 6, and
  - (b) with a total concentration of radioactivity which does not exceed 100 Bq/ml.
- (4) Sub-paragraph (3) does not apply to aqueous radioactive waste—
- (a) which a person has diluted with the intention that—
    - (i) the waste has a concentration of radioactivity which is below the value in sub-paragraph (3)(b), or
    - (ii) the condition in paragraph 22(3)(a) or (4)(b) is complied with in respect of that waste, or
  - (b) where the person who generated that waste did not minimise the quantity of radionuclides generated as waste to the extent reasonably practicable.

### **Conditions in respect of aqueous radioactive waste in paragraph 21**

**22.**—(1) The conditions referred to in paragraph 21(1) are that A must—

- (a) subject to sub-paragraph (2), dispose of the waste to which that paragraph applies—
  - (i) directly into a relevant river or the sea,
  - (ii) to a relevant sewer, or
  - (iii) to a waste permitted person,
- (b) keep an adequate record of the waste which A disposes of from the premises under that paragraph,

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- (c) in respect of the disposal of aqueous non-Table 6 waste, comply with sub-paragraph (3) or (4) as appropriate, and
  - (d) allow the regulator access to such records or such premises as the regulator may request in order to determine that all of the preceding conditions are complied with.
- (2) In respect of aqueous non-Table 6 waste disposed of from the premises, A must not use both of the disposal routes described in sub-paragraph (1)(a)(i) and (ii) in a year and where—
- (a) A uses the route in sub-paragraph (1)(a)(i), the conditions in sub-paragraph (3) apply to A, or
  - (b) A uses the route in sub-paragraph (1)(a)(ii), or A does not use the route in either sub-paragraph (1)(a)(i) or (ii), the conditions in sub-paragraph (4) apply to A.
- (3) Where this sub-paragraph applies and A disposes of the aqueous non-Table 6 waste directly into a relevant river or the sea, A must—
- (a) in respect of any aqueous non-Table 6 waste which A disposes of, ensure that the concentration of radioactivity does not exceed the value specified in column 2 of Table 7, and
  - (b) in respect of the total amount of aqueous non-Table 6 waste which A disposes of from the premises in a year, ensure that the quantity of radioactivity does not exceed the value specified in column 4 of Table 7.
- (4) Where this sub-paragraph applies and A disposes of the aqueous non-Table 6 waste to a relevant sewer (or only to a waste permitted person), A must ensure that, in respect of the total amount of aqueous non-Table 6 waste which is disposed of from those premises in a year, the total quantity of radioactivity does not exceed—
- (a) where any of that waste has a concentration of radioactivity which exceeds the value specified in column 2 of Table 7, the value in sub-paragraph (5), or
  - (b) where none of that waste has a concentration of radioactivity which exceeds the value specified in column 2 of Table 7, the value in sub-paragraph (5) or (6).
- (5) The value referred to in sub-paragraph (4)(a) and (b) is—
- (a)  $1 \times 10^8$  Bq for the sum of the following radionuclides: H-3, C-11, C-14, F-18, P-32, P-33, S-35, Ca-45, Cr-51, Fe-55, Ga-67, Sr-89, Y-90, Tc-99m, In-111, I-123, I-125, I-131, Sm-153, Tl-201, and
  - (b)  $1 \times 10^6$  Bq for the sum of all other radionuclides.
- (6) The value referred to in sub-paragraph (4)(b) is the value specified in column 3 of Table 7.
- (7) In this paragraph, “aqueous non-Table 6 waste” means aqueous radioactive waste which is not described in an entry in column 1 of Table 6.

## SECTION 8

### *Exemption for disposal of gaseous radioactive waste*

#### **Exemption for disposal of gaseous radioactive waste**

**23.**—(1) Subject to sub-paragraph (2), a person (“A”) is exempt from the requirement for an environmental permit to carry on the radioactive substances activity described in paragraph 11(2)(b) of Part 2 of this Schedule in respect of gaseous radioactive waste where—

- (a) the only radionuclide contained in that waste is Kr-85 and A—
  - (i) ensures that in respect of the total amount of such waste which is disposed of from the premises in a year, the total quantity of radioactivity does not exceed  $10^{11}$  Bq, and

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- (ii) complies with the conditions in paragraph 24(1), or
- (b) subject to sub-paragraph (3), that waste—
  - (i) is released from within a container at the time that the container is opened, and
  - (ii) is emitted by solid or liquid radioactive material within the container,
 and A complies with the conditions in paragraph 24(1).

(2) Sub-paragraph (1) does not apply to waste where the person who generated that waste did not minimise the quantity of radionuclides generated as waste to the extent reasonably practicable.

(3) Sub-paragraph (1)(b) does not apply in respect of any gas which arises as a result of a process applied by a person to the contained radioactive material.

**Conditions in respect of gaseous radioactive waste**

24.—(1) The conditions referred to in paragraph 23(1) are that A must—

- (a) to the extent that is reasonably practicable—
  - (i) in respect of relevant gaseous waste which arises in a building, cause the waste to be disposed of by an extraction system which removes the waste from the area where it arose and which vents the waste into the atmosphere, and
  - (ii) prevent the entry or, where sub-paragraph (i) applies, the re-entry, of relevant gaseous waste into a building, and
- (b) allow the regulator access to such records or such premises as the regulator may request in order to determine that all of the conditions that apply to A in respect of the relevant exemption in that paragraph are complied with.

(2) In this paragraph “relevant gaseous waste” means waste which is described in paragraph 23(1) and disposed of under the exemption in that paragraph.

*SECTION 9*

*Tables and summation rules in this Part*

**Table 4**

25. The Table 4 referred to in Sections 2 and 3 of this Part—

**Table 4**

**Radioactive material and accumulated radioactive waste: values of maximum quantities**

<i>Substance or article</i>	<i>Maximum quantity of radionuclides for each substance or article</i>	<i>Maximum quantity of radionuclides: (a) on any premises in items which satisfy the limit in column 2, or (b) in mobile radioactive apparatus held by a person</i>
A sealed source of a type not described in any other row of this Table	$4 \times 10^6$ Bq	$2 \times 10^8$ Bq

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A Class A gaseous tritium light device	2 x 10 <sup>10</sup> Bq	5 x 10 <sup>12</sup> Bq
A Class B gaseous tritium light device	1 x 10 <sup>12</sup> Bq	3 x 10 <sup>13</sup> Bq
A Class C gaseous tritium light device	1 x 10 <sup>12</sup> Bq	No limit
Any sealed source which is solely radioactive material or radioactive waste because it contains tritium	2 x 10 <sup>10</sup> Bq	5 x 10 <sup>12</sup> Bq
A tritium foil source	2 x 10 <sup>10</sup> Bq	5 x 10 <sup>12</sup> Bq
A smoke detector affixed to premises	4 x 10 <sup>6</sup> Bq	No limit
An electrodeposited source	6 x 10 <sup>8</sup> Bq Ni-63 or 2 x 10 <sup>8</sup> Bq Fe-55	6 x 10 <sup>11</sup> Bq
A luminised article	8 x 10 <sup>7</sup> Bq Pm-147 or 4 x 10 <sup>9</sup> Bq H-3	4 x 10 <sup>10</sup> Bq Pm-147 or 2 x 10 <sup>11</sup> Bq H-3
A Ba-137m eluting source	4 x 10 <sup>4</sup> Bq Cs-137+	4 x 10 <sup>5</sup> Bq Cs-137+
A substance or article which is or contains magnesium alloy or thoriated tungsten in which the thorium concentration does not exceed 4% by mass	No limit	No limit
A uranium or thorium compound	Up to a total of 5kg of uranium and thorium	Up to a total of 5kg of uranium and thorium
A substance or article (other than a sealed source) which is intended for use for, used for, or arises from medical or veterinary diagnosis or treatment or clinical or veterinary trials	1 x 10 <sup>9</sup> Bq Tc-99m and [ <sup>F306</sup> 2 x 10 <sup>8</sup> Bq of all other radionuclides, (no more than 1 x 10 <sup>8</sup> Bq of which is contained in radioactive material)]	1 x 10 <sup>9</sup> Bq Tc-99m and 2 x 10 <sup>8</sup> Bq of all other radionuclides, (no more than 1 x 10 <sup>8</sup> Bq of which is contained in radioactive material)

**Textual Amendments**

**F306** Words in Sch. 23 Pt. 6 para. 25 Table 4 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 32**

<sup>F307</sup>**Table 4A**

**25A.**—(1) The Table 4A referred to in Sections 2, 5 and 6 of this Part is—

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**Table 4A**

**NORM waste concentrations and maximum disposal quantities**

<i>Radionuclide</i>	<i>Type 1 NORM concentration (Bq/g)</i>	<i>Type 1 NORM total activity for landfill (GBq/year)</i>	<i>Type 1 NORM total activity for incineration (MBq/year)</i>	<i>Type 2 NORM concentration (Bq/g)</i>
U-238sec	5	50	100	10
U238+	5	50	100	10
U-234	5	50	100	10
Th-230	5	50	100	10
Ra-226+	5	50	100	10
Pb-210+	100	1000	100	200
Po-210	100	1000	100	200
U-235sec	5	50	100	10
U-235+	5	50	100	10
Pa-231	5	50	100	10
Ac-227+	5	50	100	10
Th-232sec	5	50	100	10
Th-232	5	50	100	10
Ra-228+	5	50	100	10
Th-228+	5	50	100	10

(2) The summation rule in respect of columns 2 and 5 of Table 4A is the sum of the quotients A/B where—

- (a) “A” means the concentration of each radionuclide listed in column 1 of Table 4A that is present in the substance or article; and
- (b) “B” means the concentration of that radionuclide specified in column 2 or 5 (as appropriate) of Table 4A.

(3) The summation rule in respect of columns 3 and 4 of Table 4A is the sum of the quotients C/D where—

- (a) “C” means the quantity of each radionuclide listed in column 1 of Table 4A that is present in the substance or article; and
- (b) “D” means the quantity of that radionuclide specified in column 3 or 4 (as appropriate) of Table 4A.]

**Textual Amendments**

**F307** Sch. 23 Pt. 6 para. 25A inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 33**

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**Table 5**

26.—(1) The Table 5 referred to in Sections 2 and 4 of this Part is—

**Table 5****Radionuclides: values of quantities and concentrations**

<i>Radionuclides</i>	<i>Maximum quantity of radioactivity (Bq) on any premises</i>	<i>Maximum concentration (Bq/g)</i>
H-3	$10^9$	$10^6$
Be-7	$10^7$	$10^3$
C-14	$10^7$	$10^4$
O-15	$10^9$	$10^2$
F-18	$10^6$	10
Na-22	$10^6$	10
Na-24	$10^5$	10
Si-31	$10^6$	$10^3$
P-32	$10^5$	$10^3$
P-33	$10^8$	$10^5$
S-35	$10^8$	$10^5$
Cl-36	$10^6$	$10^4$
Cl-38	$10^5$	10
Ar-37	$10^8$	$10^6$
Ar-41	$10^9$	$10^2$
K-42	$10^6$	$10^2$
K-43	$10^6$	10
Ca-45	$10^7$	$10^4$
Ca-47	$10^6$	10
Sc-46	$10^6$	10
Sc-47	$10^6$	$10^2$
Sc-48	$10^5$	10
V-48	$10^5$	10
Cr-51	$10^7$	$10^3$

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Mn-51	$10^5$	10
Mn-52	$10^5$	10
Mn-52m	$10^5$	10
Mn-53	$10^9$	$10^4$
Mn-54	$10^6$	10
Mn-56	$10^5$	10
Fe-52	$10^6$	10
Fe-55	$10^6$	$10^4$
Fe-59	$10^6$	10
Co-55	$10^6$	10
Co-56	$10^5$	10
Co-57	$10^6$	$10^2$
Co-58	$10^6$	10
Co-58m	$10^7$	$10^4$
Co-60	$10^5$	10
Co-60m	$10^6$	$10^3$
Co-61	$10^6$	$10^2$
Co-62m	$10^5$	10
Ni-59	$10^8$	$10^4$
Ni-63	$10^8$	$10^5$
Ni-65	$10^6$	10
Cu-64	$10^6$	$10^2$
Zn-65	$10^6$	10
Zn-69	$10^6$	$10^4$
Zn-69m	$10^6$	$10^2$
Ga-72	$10^5$	10
Ge-71	$10^8$	$10^4$
As-73	$10^7$	$10^3$
As-74	$10^6$	10
As-76	$10^5$	$10^2$
As-77	$10^6$	$10^3$

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Se-75	$10^6$	$10^2$
Br-82	$10^6$	10
Kr-74	$10^9$	$10^2$
Kr-76	$10^9$	$10^2$
Kr-77	$10^9$	$10^2$
Kr-79	$10^5$	$10^3$
Kr-81	$10^7$	$10^4$
Kr-83m	$10^{12}$	$10^5$
Kr-85	$10^4$	$10^5$
Kr-85m	$10^{10}$	$10^3$
Kr-87	$10^9$	$10^2$
Kr-88	$10^9$	$10^2$
Rb-86	$10^5$	$10^2$
Sr-85	$10^6$	$10^2$
Sr-85m	$10^7$	$10^2$
Sr-87m	$10^6$	$10^2$
Sr-89	$10^6$	$10^3$
Sr-90+	$10^4$	$10^2$
Sr-91	$10^5$	10
Sr-92	$10^6$	10
Y-90	$10^5$	$10^3$
Y-91	$10^6$	$10^3$
Y-91m	$10^6$	$10^2$
Y-92	$10^5$	$10^2$
Y-93	$10^5$	$10^2$
Zr-93+	$10^7$	$10^3$
Zr-95	$10^6$	10
Zr-97+	$10^5$	10
Nb-93m	$10^7$	$10^4$
Nb-94	$10^6$	10
Nb-95	$10^6$	10



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Nb-97	$10^6$	10
Nb-98	$10^5$	10
Mo-90	$10^6$	10
Mo-93	$10^8$	$10^3$
Mo-99	$10^6$	$10^2$
Mo-101	$10^6$	10
Tc-96	$10^6$	10
Tc-96m	$10^7$	$10^3$
Tc-97	$10^8$	$10^3$
Tc-97m	$10^7$	$10^3$
Tc-99	$10^7$	$10^4$
Tc-99m	$10^7$	$10^2$
Ru-97	$10^7$	$10^2$
Ru-103	$10^6$	$10^2$
Ru-105	$10^6$	10
Ru-106+	$10^5$	$10^2$
Rh-103m	$10^8$	$10^4$
Rh-105	$10^7$	$10^2$
Pd-103	$10^8$	$10^3$
Pd-109	$10^6$	$10^3$
Ag-105	$10^6$	$10^2$
Ag-108m+	$10^6$	10
Ag-110m	$10^6$	10
Ag-111	$10^6$	$10^3$
Cd-109	$10^6$	$10^4$
Cd-115	$10^6$	$10^2$
Cd-115m	$10^6$	$10^3$
In-111	$10^6$	$10^2$
In-113m	$10^6$	$10^2$
In-114m	$10^6$	$10^2$
In-115m	$10^6$	$10^2$

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Sn-113	$10^7$	$10^3$
Sn-125	$10^5$	$10^2$
Sb-122	$10^4$	$10^2$
Sb-124	$10^6$	10
Sb-125	$10^6$	$10^2$
Te-123m	$10^7$	$10^2$
Te-125m	$10^7$	$10^3$
Te-127	$10^6$	$10^3$
Te-127m	$10^7$	$10^3$
Te-129	$10^6$	$10^2$
Te-129m	$10^6$	$10^3$
Te-131	$10^5$	$10^2$
Te-131m	$10^6$	10
Te-132	$10^7$	$10^2$
Te-133	$10^5$	10
Te-133m	$10^5$	10
Te-134	$10^6$	10
I-123	$10^7$	$10^2$
I-125	$10^6$	$10^3$
I-126	$10^6$	$10^2$
I-129	$10^5$	$10^2$
I-130	$10^6$	10
I-131	$10^6$	$10^2$
I-132	$10^5$	10
I-133	$10^6$	10
I-134	$10^5$	10
I-135	$10^6$	10
Xe-131m	$10^4$	$10^4$
Xe-133	$10^4$	$10^3$
Xe-135	$10^{10}$	$10^3$
Cs-129	$10^5$	$10^2$

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Cs-131	$10^6$	$10^3$
Cs-132	$10^5$	10
Cs-134m	$10^5$	$10^3$
Cs-134	$10^4$	10
Cs-135	$10^7$	$10^4$
Cs-136	$10^5$	10
Cs-137+	$10^4$	10
Cs-138	$10^4$	10
Ba-131	$10^6$	$10^2$
Ba-140+	$10^5$	10
La-140	$10^5$	10
Ce-139	$10^6$	$10^2$
Ce-141	$10^7$	$10^2$
Ce-143	$10^6$	$10^2$
Ce-144+	$10^5$	$10^2$
Pr-142	$10^5$	$10^2$
Pr-143	$10^6$	$10^4$
Nd-147	$10^6$	$10^2$
Nd-149	$10^6$	$10^2$
Pm-147	$10^7$	$10^4$
Pm-149	$10^6$	$10^3$
Sm-151	108	$10^4$
Sm-153	$10^6$	$10^2$
Eu-152	$10^6$	10
Eu-152m	$10^6$	$10^2$
Eu-154	$10^6$	10
Eu-155	$10^7$	$10^2$
Gd-153	$10^7$	$10^2$
Gd-159	$10^6$	$10^3$
Tb-160	$10^6$	10
Dy-165	$10^6$	$10^3$

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Dy-166	$10^6$	$10^3$
Ho-166	$10^5$	$10^3$
Er-169	$10^7$	$10^4$
Er-171	$10^6$	$10^2$
Tm-170	$10^6$	$10^3$
Tm-171	$10^8$	$10^4$
Yb-175	$10^7$	$10^3$
Lu-177	$10^7$	$10^3$
Hf-181	$10^6$	10
Ta-182	$10^4$	10
W-181	$10^7$	$10^3$
W-185	$10^7$	$10^4$
W-187	$10^6$	$10^2$
Re-186	$10^6$	$10^3$
Re-188	$10^5$	$10^2$
Os-185	$10^6$	10
Os-191	$10^7$	$10^2$
Os-191m	$10^7$	$10^3$
Os-193	$10^6$	$10^2$
Ir-190	$10^6$	10
Ir-192	$10^4$	10
Ir-194	$10^5$	$10^2$
Pt-191	$10^6$	$10^2$
Pt-193m	$10^7$	$10^3$
Pt-197	$10^6$	$10^3$
Pt-197m	$10^6$	$10^2$
Au-198	$10^6$	$10^2$
Au-199	$10^6$	$10^2$
Hg-197	$10^7$	$10^2$
Hg-197m	$10^6$	$10^2$
Hg-203	$10^5$	$10^2$

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Tl-200	$10^6$	10
Tl-201	$10^6$	$10^2$
Tl-202	$10^6$	$10^2$
Tl-204	$10^4$	$10^4$
Pb-203	$10^6$	$10^2$
Pb-210+	$10^4$	10
Pb-212+	$10^5$	10
Bi-206	$10^5$	10
Bi-207	$10^6$	10
Bi-210	$10^6$	$10^3$
Bi-212+	$10^5$	10
Po-203	$10^6$	10
Po-205	$10^6$	10
Po-207	$10^6$	10
Po-210	$10^4$	10
At-211	$10^7$	$10^3$
Rn-220+	$10^7$	$10^4$
Rn-222+	$10^8$	10
Ra-223+	$10^5$	$10^2$
Ra-224+	$10^5$	10
Ra-225	$10^5$	$10^2$
Ra-226+	$10^4$	10
Ra-227	$10^6$	$10^2$
Ra-228+	$10^5$	10
Ac-228	$10^6$	10
Th-226+	$10^7$	$10^3$
Th-227	$10^4$	10
Th-228+	$10^4$	1
Th-229+	$10^3$	1
Th-230	$10^4$	1
Th-231	$10^7$	$10^3$

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Th-232 sec	$10^3$	1
Th-234+	$10^5$	$10^3$
Pa-230	$10^6$	10
Pa-231	$10^3$	1
Pa-233	$10^7$	$10^2$
U-230+	$10^5$	10
U-231	$10^7$	$10^2$
U-232+	$10^3$	1
U-233	$10^4$	10
U-234	$10^4$	10
U-235+	$10^4$	10
U-236	$10^4$	10
U-237	$10^6$	$10^2$
U-238+	$10^4$	10
U-238 sec	$10^3$	1
U-239	$10^6$	$10^2$
U-240	$10^7$	$10^3$
U-240+	$10^6$	10
Np-237+	$10^3$	1
Np-239	$10^7$	$10^2$
Np-240	$10^6$	10
Pu-234	$10^7$	$10^2$
Pu-235	$10^7$	$10^2$
Pu-236	$10^4$	10
Pu-237	$10^7$	$10^3$
Pu-238	$10^4$	1
Pu-239	$10^4$	1
Pu-240	$10^3$	1
Pu-241	$10^5$	$10^2$
Pu-242	$10^4$	1
Pu-243	$10^7$	$10^3$

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Pu-244	$10^4$	1
Am-241	$10^4$	1
Am-242	$10^6$	$10^3$
Am-242m+	$10^4$	1
Am-243+	$10^3$	1
Cm-242	$10^5$	$10^2$
Cm-243	$10^4$	1
Cm-244	$10^4$	10
Cm-245	$10^3$	1
Cm-246	$10^3$	1
Cm-247	$10^4$	1
Cm-248	$10^3$	1
Bk-249	$10^6$	$10^3$
Cf-246	$10^6$	$10^3$
Cf-248	$10^4$	10
Cf-249	$10^3$	1
Cf-250	$10^4$	10
Cf-251	$10^3$	1
Cf-252	$10^4$	10
Cf-253	$10^5$	$10^2$
Cf-254	$10^3$	1
Es-253	$10^5$	$10^2$
Es-254	$10^4$	10
Es-254m	$10^6$	$10^2$
Fm-254	$10^7$	$10^4$
Fm-255	$10^6$	$10^3$
Any other radionuclide that is:	$10^3$ , or the quantity given	1, or the concentration given in
(a) not of natural terrestrial or cosmic origin, or	in respect of that radionuclide in the [F308Public Health England] publication ‘Exempt Concentrations and Quantities for Radionuclides not Included in the European Basic Safety Standards Directive’	respect of that radionuclide in the publication referenced in column 2.
(b) listed in Table 2 in this Schedule.		

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- (2) The summation rule in respect of column 2 of Table 5 is the sum of the quotients A/B where—
- (a) “A” means the quantity of each radionuclide listed in column 1 of Table 5 that is present in the material and waste, and
  - (b) “B” means the quantity of that radionuclide specified in column 2 of Table 5.
- (3) The summation rule in respect of [<sup>F309</sup>column 3] of Table 5 is the sum of the quotients C/D where—
- (a) “C” means the concentration of each radionuclide listed in column 1 of Table 5 that is present in the material and waste, and
  - (b) “D” means the concentration of that radionuclide specified in column 3 of Table 5.

**Textual Amendments**

**F308** Words in Sch. 23 Pt. 6 para. 26(1) Table 5 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\), reg. 1, Sch. para. 34\(a\)](#)

**F309** Words in Sch. 23 Pt. 6 para. 26(3) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\), reg. 1, Sch. para. 34\(b\)](#)

**Marginal Citations**

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**Table 6**

27. The Table 6 referred to in Sections 5 and 7 of this Part is—

**Table 6**

**Radioactive waste: values of quantities and concentrations**

<i>Radioactive waste</i>	<i>Maximum concentration of radionuclides</i>	<i>Maximum quantity of radioactivity to be disposed of in the period stated</i>
Solid radioactive waste, with no single item > 4 x 10 <sup>4</sup> Bq	4 x 10 <sup>5</sup> Bq for the sum of all radionuclides per 0.1m <sup>3</sup>	2 x 10 <sup>8</sup> Bq/year
Solid radioactive waste containing tritium and C-14 only, with no single item > 4 x 10 <sup>5</sup> Bq	4 x 10 <sup>6</sup> Bq of tritium and C-14 per 0.1m <sup>3</sup>	2 x 10 <sup>9</sup> Bq/year
Individual sealed sources	2 x 10 <sup>5</sup> Bq for the sum of all radionuclides per 0.1m <sup>3</sup>	1 x 10 <sup>7</sup> Bq/year
Individual sealed sources which are solely radioactive waste because they contain tritium	2 x 10 <sup>10</sup> Bq of tritium per 0.1m <sup>3</sup>	1 x 10 <sup>13</sup> Bq/year



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Luminised articles with no single item containing > 8 x 10 <sup>7</sup> Bq of Pm-147 or > 4 x 10 <sup>9</sup> of tritium	8 x 10 <sup>7</sup> Bq per 0.1m <sup>3</sup> of Pm-147 or 4 x 10 <sup>9</sup> Bq per 0.1m <sup>3</sup> for tritium	2 x 10 <sup>9</sup> Bq/year of Pm-147 or 1 x 10 <sup>11</sup> Bq/year of tritium
Solid radioactive waste which consists of magnesium alloy, thoriated tungsten or dross from hardener alloy in which the thorium concentration does not exceed 4% by mass	No limit	No limit
Solid uranium or thorium compound	No limit	0.5kg of uranium or thorium per week
Aqueous liquid uranium or thorium compound	No limit	0.5kg of uranium or thorium per year
Aqueous liquid human excreta	No limit	1 x 10 <sup>10</sup> Bq/year of Tc-99m and 5 x 10 <sup>9</sup> Bq/year for the sum of all other radionuclides

**Table 7**

28.—(1) The Table 7 referred to in Section 7 of this Part is—

**Table 7**

**Aqueous radioactive waste values**

<i>Radionuclide</i>	<i>Concentration in Bq/litre</i>	<i>Maximum quantity of radionuclides to a relevant sewer (Bq/year)</i>	<i>Maximum annual quantity of radionuclides directly into a relevant river or the sea (Bq/year)</i>
H-3	10 <sup>3</sup>	10 <sup>10</sup>	10 <sup>10</sup>
Be-7	1	10 <sup>7</sup>	10 <sup>7</sup>
C-14	0.1	10 <sup>6</sup>	10 <sup>6</sup>
F-18	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Na-22	1	10 <sup>6</sup>	10 <sup>7</sup>
Na-24	1	10 <sup>7</sup>	10 <sup>7</sup>
Si-31	10	10 <sup>8</sup>	10 <sup>8</sup>
P-32	0.001	10 <sup>4</sup>	10 <sup>4</sup>
P-33	0.001	10 <sup>4</sup>	10 <sup>4</sup>

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S-35	10	$3 \times 10^7$	$10^8$
Cl-36	10	$10^7$	$10^8$
Cl-38	0.1	$10^6$	$10^6$
K-42	0.01	$10^5$	$10^5$
K-43	0.01	$10^5$	$10^5$
Ca-45	1	$10^7$	$10^7$
Ca-47	0.1	$10^6$	$10^6$
Sc-46	0.001	$10^4$	$10^4$
Sc-47	0.01	$10^5$	$10^5$
Sc-48	0.001	$10^4$	$10^4$
V-48	1	$10^7$	$10^7$
Cr-51	10	$10^8$	$10^8$
Mn-51	0.001	$10^4$	$10^4$
Mn-52	0.001	$10^4$	$10^4$
Mn-52m	0.001	$10^4$	$10^4$
Mn-53	1	$10^7$	$10^7$
Mn-54	0.01	$10^5$	$10^5$
Mn-56	0.001	$10^4$	$10^4$
Fe-52	0.01	$10^5$	$10^5$
Fe-55	1	$10^7$	$10^7$
Fe-59	0.01	$10^5$	$10^5$
Co-55	0.001	$10^4$	$10^4$
Co-56	0.001	$10^4$	$10^4$
Co-57	0.1	$10^6$	$10^6$
Co-58	0.1	$10^6$	$10^6$
Co-58m	1	$10^7$	$10^7$
Co-60	0.01	$10^5$	$10^5$
Co-60m	1	$10^7$	$10^7$
Co-61	0.1	$10^6$	$10^6$
Co-62m	0.001	$10^4$	$10^4$
Ni-59	1	$10^7$	$10^7$

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Ni-63	10 <sup>2</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Ni-65	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cu-64	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Zn-65	0.1	3 x 10 <sup>5</sup>	10 <sup>6</sup>
Zn-69	10	10 <sup>8</sup>	10 <sup>8</sup>
Zn-69m	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Ga-67	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Ga-72	0.001	10 <sup>4</sup>	10 <sup>4</sup>
Ge-71	1	10 <sup>7</sup>	10 <sup>7</sup>
As-73	10	10 <sup>8</sup>	10 <sup>8</sup>
As-74	1	10 <sup>7</sup>	10 <sup>7</sup>
As-76	1	10 <sup>7</sup>	10 <sup>7</sup>
As-77	1	10 <sup>7</sup>	10 <sup>7</sup>
Se-75	0.1	3 x 10 <sup>5</sup>	10 <sup>6</sup>
Br-82	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Rb-86	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Sr-85	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Sr-85m	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Sr-87m	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Sr-89	1	10 <sup>7</sup>	10 <sup>7</sup>
Sr-90+	0.1	3 x 10 <sup>5</sup>	10 <sup>6</sup>
Sr-91	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Sr-92	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Y-90	1	10 <sup>7</sup>	10 <sup>7</sup>
Y-91	1	10 <sup>7</sup>	10 <sup>7</sup>
Y-91m	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Y-92	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Y-93	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Zr-93	10	10 <sup>8</sup>	10 <sup>8</sup>
Zr-95+	0.001	10 <sup>4</sup>	10 <sup>4</sup>
Zr-97	0.01	10 <sup>5</sup>	10 <sup>5</sup>

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Nb-93m	10	$10^8$	$10^8$
Nb-94	0.1	$10^6$	$10^6$
Nb-95	1	$10^7$	$10^7$
Nb-97	1	$10^7$	$10^7$
Nb-98	0.1	$10^6$	$10^6$
Mo-90	0.1	$10^6$	$10^6$
Mo-93	1	$10^7$	$10^7$
Mo-99	0.1	$10^6$	$10^6$
Mo-101	0.01	$10^5$	$10^5$
Tc-96	1	$10^7$	$10^7$
Tc-96m	$10^2$	$10^9$	$10^9$
Tc-97	$10^2$	$10^9$	$10^9$
Tc-97m	10	$10^8$	$10^8$
Tc-99	10	$10^7$	$10^8$
Tc-99m	10	$3 \times 10^7$	$10^8$
Ru-97	0.01	$10^5$	$10^5$
Ru-103	0.01	$10^5$	$10^5$
Ru-105	0.01	$10^5$	$10^5$
Ru-106+	0.1	$10^6$	$10^6$
Rh-103m	10	$10^8$	$10^8$
Rh-105	1	$10^7$	$10^7$
Pd-103	0.1	$10^6$	$10^6$
Pd-109	0.1	$10^6$	$10^6$
Ag-105	1	$10^7$	$10^7$
Ag-108m	0.1	$10^6$	$10^6$
Ag-110m	0.1	$10^6$	$10^6$
Ag-111	10	$10^8$	$10^8$
Cd-109	1	$10^7$	$10^7$
Cd-115	0.1	$10^6$	$10^6$
Cd-115m	1	$10^7$	$10^7$
In-111	0.01	$10^5$	$10^5$

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In-113m	0.01	$10^5$	$10^5$
In-114m	0.01	$10^5$	$10^5$
In-115m	0.01	$10^5$	$10^5$
Sn-113	0.1	$10^6$	$10^6$
Sn-125	0.01	$10^5$	$10^5$
Sb-122	0.1	$10^6$	$10^6$
Sb-124	0.1	$10^6$	$10^6$
Sb-125	1	$10^7$	$10^7$
Te-123m	1	$10^7$	$10^7$
Te-125m	1	$10^7$	$10^7$
Te-127	10	$10^8$	$10^8$
Te-127m	1	$10^7$	$10^7$
Te-129	10	$10^8$	$10^8$
Te-129m	1	$10^7$	$10^7$
Te-131	1	$10^7$	$10^7$
Te-131m	1	$10^7$	$10^7$
Te-132	0.1	$10^6$	$10^6$
Te-133	1	$10^7$	$10^7$
Te-133m	1	$10^7$	$10^7$
Te-134	1	$10^7$	$10^7$
I-123	1	$10^7$	$10^7$
I-125	1	$10^7$	$10^7$
I-126	0.1	$10^6$	$10^6$
I-129	0.1	$10^6$	$10^6$
I-130	0.1	$10^6$	$10^6$
I-131	0.1	$10^6$	$10^6$
I-132	0.1	$10^6$	$10^6$
I-133	0.1	$10^6$	$10^6$
I-134	0.1	$10^6$	$10^6$
I-135	0.1	$10^6$	$10^6$
Cs-129	0.01	$10^5$	$10^5$

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Cs-131	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cs-132	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cs-134	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cs-134m	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cs-135	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cs-136	0.001	10 <sup>4</sup>	10 <sup>4</sup>
Cs-137+	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cs-138	0.001	10 <sup>4</sup>	10 <sup>4</sup>
Ba-131	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Ba-140	0.1	10 <sup>6</sup>	10 <sup>6</sup>
La-140	0.001	10 <sup>4</sup>	10 <sup>4</sup>
Ce-139	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Ce-141	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Ce-143	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Ce-144	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pr-142	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pr-143	10	10 <sup>8</sup>	10 <sup>8</sup>
Nd-147	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Nd-149	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Pm-147	10	10 <sup>8</sup>	10 <sup>8</sup>
Pm-149	1	10 <sup>7</sup>	10 <sup>7</sup>
Sm-151	10 <sup>2</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Sm-153	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Eu-152	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Eu-152m	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Eu-154	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Eu-155	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Gd-153	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Gd-159	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Tb-160	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Dy-165	0.1	10 <sup>6</sup>	10 <sup>6</sup>

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Dy-166	0.1	$10^6$	$10^6$
Ho-166	0.1	$10^6$	$10^6$
Er-169	10	$10^8$	$10^8$
Er-171	0.01	$10^5$	$10^5$
Tm-170	1	$10^7$	$10^7$
Tm-171	10	$10^8$	$10^8$
Yb-175	0.1	$10^6$	$10^6$
Lu-177	0.1	$10^6$	$10^6$
Hf-181	0.01	$10^5$	$10^5$
Ta-182	0.001	$10^4$	$10^4$
W-181	0.1	$10^6$	$10^6$
W-185	1	$10^7$	$10^7$
W-187	0.01	$10^5$	$10^5$
Re-186	1	$10^7$	$10^7$
Re-188	1	$10^7$	$10^7$
Os-185	0.01	$10^5$	$10^5$
Os-191	0.1	$10^6$	$10^6$
Os-191m	1	$10^7$	$10^7$
Os-193	0.1	$10^6$	$10^6$
Ir-190	0.001	$10^4$	$10^4$
Ir-192	0.01	$10^5$	$10^5$
Ir-194	0.1	$10^6$	$10^6$
Pt-191	0.01	$10^5$	$10^5$
Pt-193m	1	$10^7$	$10^7$
Pt-197	0.1	$10^6$	$10^6$
Pt-197m	0.1	$10^6$	$10^6$
Au-198	1	$10^7$	$10^7$
Au-199	1	$10^7$	$10^7$
Hg-197	1	$10^7$	$10^7$
Hg-197m	0.1	$10^6$	$10^6$
Hg-203	0.1	$10^6$	$10^6$

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Tl-200	0.01	$10^5$	$10^5$
Tl-201	0.1	$10^6$	$10^6$
Tl-202	0.01	$10^5$	$10^5$
Tl-204	0.1	$10^6$	$10^6$
Pb-203	0.01	$10^5$	$10^5$
Pb-210	0.001	$10^4$	$10^4$
Pb-212	0.1	$10^6$	$10^6$
Bi-206	0.01	$10^5$	$10^5$
Bi-207	0.1	$10^6$	$10^6$
Bi-210	10	$10^8$	$10^8$
Bi-212	1	$10^7$	$10^7$
Po-203	0.001	$10^4$	$10^4$
Po-205	0.001	$10^4$	$10^4$
Po-207	0.001	$10^4$	$10^4$
Po-210	0.001	$10^4$	$10^4$
At-211	1	$10^7$	$10^7$
Ra-223	0.01	$10^5$	$10^5$
Ra-224+	0.01	$10^5$	$10^5$
Ra-225	0.01	$10^5$	$10^5$
Ra-226+	0.01	$10^5$	$10^5$
Ra-227	1	$10^7$	$10^7$
Ra-228	0.01	$10^5$	$10^5$
Ac-227	0.1	$10^6$	$10^6$
Ac-228	0.001	$10^4$	$10^4$
Th-226	0.1	$10^6$	$10^6$
Th-227	0.01	$10^5$	$10^5$
Th-228	1	$10^7$	$10^7$
Th-229	0.01	$10^5$	$10^5$
Th-230	1	$10^7$	$10^7$
Th-231	0.1	$10^6$	$10^6$
Th-232	1	$10^6$	$10^7$



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Th-234	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pa-230	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Pa-231	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Pa-233	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-230	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-231	10	10 <sup>8</sup>	10 <sup>8</sup>
U-232	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-233	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-234	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-235+	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-236	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-237	10	10 <sup>8</sup>	10 <sup>8</sup>
U-238+	0.1	10 <sup>6</sup>	10 <sup>6</sup>
U-239	10	10 <sup>8</sup>	10 <sup>8</sup>
U-240	10	10 <sup>8</sup>	10 <sup>8</sup>
Np-237	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Np-239	1	10 <sup>7</sup>	10 <sup>7</sup>
Np-240	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-234	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Pu-235	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Pu-236	1	10 <sup>7</sup>	10 <sup>7</sup>
Pu-237	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-238	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-239	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-240	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-241	10	10 <sup>8</sup>	10 <sup>8</sup>
Pu-242	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-243	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Pu-244	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Am-241	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Am-242	0.1	10 <sup>6</sup>	10 <sup>6</sup>

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Am-242m	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Am-243	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cm-242	1	10 <sup>7</sup>	10 <sup>7</sup>
Cm-243	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cm-244	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cm-245	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cm-246	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cm-247	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cm-248	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Bk-249	10 <sup>2</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Cf-246	1	10 <sup>7</sup>	10 <sup>7</sup>
Cf-248	1	10 <sup>7</sup>	10 <sup>7</sup>
Cf-249	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cf-250	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cf-251	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Cf-252	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Cf-253	10	10 <sup>8</sup>	10 <sup>8</sup>
Cf-254	0.0001	10 <sup>3</sup>	10 <sup>3</sup>
Es-253	1	10 <sup>7</sup>	10 <sup>7</sup>
Es-254	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Es-254m	0.01	10 <sup>5</sup>	10 <sup>5</sup>
Fm-254	1	10 <sup>7</sup>	10 <sup>7</sup>
Fm-255	0.1	10 <sup>6</sup>	10 <sup>6</sup>
Any other radionuclide that is not of natural terrestrial or cosmic origin	0.0001	10 <sup>3</sup>	10 <sup>3</sup>
	or that concentration which gives rise to a dose to a member of the public of 10 microsieverts per year calculated in accordance with the methodology used to calculate other concentrations in this table	or that quantity which corresponds to 3,000m <sup>3</sup> of aqueous radioactive waste up to the appropriate concentration as calculated in accordance with column 2.	or that quantity which corresponds to 10,000m <sup>3</sup> of aqueous radioactive waste up to the appropriate concentration as calculated in accordance with column 2.

M124

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- (2) The summation rule in respect of column 2 of Table 7 is the sum of the quotients A/B where—
- (a) “A” means the concentration in Bq/ litre of each radionuclide listed in column 1 of Table 7 that is present in aqueous waste which is not described in a row in column 1 of Table 6, and
  - (b) “B” means the concentration of that radionuclide specified in column 2 of Table 7.
- (3) The summation rule in respect of column 3 of Table 7 is the sum of the quotients C/D where—
- (a) “C” means the quantity in Bq of each radionuclide listed in column 1 of Table 7 that is present in the aqueous waste which is not described in a row in column 1 of Table 6 which is disposed of in the year, and
  - (b) “D” means the quantity of that radionuclide specified in column 3 of Table 7.
- (4) The summation rule in respect of column 4 of Table 7 is the sum of the quotients C/E where—
- (a) “C” means the quantity in Bq of each radionuclide listed in column 1 of Table 7 that is present in the aqueous waste which is not described in a row in column 1 of Table 6 which is disposed of in the year, and
  - (b) “E” means the quantity of that radionuclide specified in column 4 of Table 7.

#### Marginal Citations

**M124** The concentrations in this table were calculated using methods adopted by the Health Protection Agency in their document HPA-CRCE-005 - Derivation of Liquid Exclusion or Exemption Levels to Support the RSA93 Exemption Order Review, published in Chilton, Oxfordshire in August 2010 (ISBN 0-978-85951-673-0).

#### Interpretation of this Section

29. In this Section, where any radionuclide carries the suffix “+” or “sec”—
- (a) that radionuclide represents the parent radionuclide in secular equilibrium with the corresponding daughter radionuclides which are identified in column 2 of Table 8 adjacent to that parent radionuclide, and
  - (b) a concentration or activity value given in respect of such a parent radionuclide is the value for the parent radionuclide alone, but already takes into account the daughter radionuclides in column 2 that are present.

#### Table 8

30. The Table 8 referred to in paragraph 29 is—

**Table 8**

#### Radionuclides in secular equilibrium

<i>Parent radionuclide</i>	<i>Daughter radionuclides</i>
Sr-90+	Y-90
Zr-93+	Nb-93m
Zr-95+	Nb-95
Zr-97+	Nb-97

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Ru-106+	Rh-106
Ag-108m+	Ag-108
Cs-137+	Ba-137m
Ba-140+	La-140
Ce-144+	Pr-144
Pb-210+	Bi-210, Po-210
Pb-212+	Bi-212, Tl-208, Po-212
Bi-212+	Tl-208, Po-212
Rn-220+	Po-216
Rn-222+	Po-218, Pb-214, Bi-214, Po-214
Ra-223+	Rn-219, Po-215, Pb-211, Bi-211, Tl-207
Ra-224+	Where Ra-224+ is referred to in Table 5: Rn-220, Po-216, Pb-212, Bi-212, Tl-208, Po-212 Where Ra-224+ is referred to in Table 7: Pb-212
Ra-226+	Where Ra-226+ is referred to in [ <sup>F310</sup> Table 4A and] Table 5: Rn-222, Po-218, Pb-214, Bi-214, [ <sup>F311</sup> Po-214, Pb-210, Bi-210, Po-210] Where Ra-226+ is referred to in Table 7: Rn-222, Po-218, Pb-214, Bi-214, Po-214
Ra-228+	Ac-228
Th-226+	Ra-222, Rn-218, Po-214
Th-228+	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Po-212, Tl-208
Th-229+	Ra-225, Ac-225, Fr-221, At-217, Bi-213, Po-213, Pb-209
Th-232 sec	Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Po-212, Tl-208
Th-234+	Pa-234m
U-230+	Th-226, Ra-222, Rn-218, Po-214
U-232+	Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208, Po-212
U-235+	Th-231
U-238+	Th-234, Pa-234m, Pa-234
U-238 sec	Th-234, Pa-234m, U-234, Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214 [ <sup>F312</sup> , Po-214, Pb-210, Bi-210, Po-210]
U-240+	Np-240
Np-237+	Pa-233

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Am-242m+

Am-242

Am-243+

Np-239

### Textual Amendments

- F310** Words in Sch. 23 Pt. 6 para. 30 Table 8 inserted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 35\(a\)\(i\)](#)
- F311** Words in Sch. 23 Pt. 6 para. 30 Table 8 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 35\(a\)\(ii\)](#)
- F312** Words in Sch. 23 Pt. 6 para. 30 Table 8 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, [Sch. para. 35\(b\)](#)

## PART 7

### Radioactivity to be disregarded

#### Application

1.—(1) For the purposes of the matters referred to in sub-paragraph (2), no account is to be taken of any radioactivity possessed by a substance or article or by a part of any premises.

(2) The matters are—

- (a) the operation of a provision to which this Part applies,
- (b) the exercise of a power conferred by, or for the enforcement of, a provision to which this Part applies, and
- (c) the performance of a duty imposed by, or for the enforcement of, a provision to which this Part applies.

(3) This Part applies to a provision—

- (a) specified in paragraph 2,
- (b) contained in an instrument made under a provision so specified,
- (c) which has effect by virtue of a provision so specified, or
- (d) which extends or applies a provision so specified.

(4) This Part also applies to a provision of a local enactment (whenever passed or made and however expressed) insofar as it—

- (a) prohibits or restricts—
  - (i) the disposal or accumulation of waste,
  - (ii) the disposal or accumulation of a substance which is or causes a nuisance, or
  - (iii) a disposal or accumulation which causes pollution, or
- (b) confers a power, or imposes a duty, on a public authority or an officer of a public authority to take action to prevent, restrict or abate a disposal or accumulation of a description given in paragraph (a).

(5) In sub-paragraph (4)—

- (a) a reference to “disposal” in relation to a provision to which this Part applies, means—
  - (i) the discharge or deposit of a substance, or

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- (ii) the allowing of a substance to escape or to enter a stream or other place, as may be mentioned in that provision, and
- (b) “local enactment” means—
  - (i) a local or private Act,
  - (ii) an order confirmed by Parliament or brought into operation in accordance with special parliamentary procedure, or
  - (iii) an order confirmed by the National Assembly for Wales or brought into operation in accordance with special procedure in the Assembly.

**Provisions of enactments**

- 2.—(1) The provisions referred to in paragraph 1(3) are those listed in Table 9 below.
- (2) References to provisions of the 1991 Act have effect subject to the power conferred by section 98 of that Act <sup>M125</sup>.

**Table 9**

**Statutory provisions in respect of which radioactivity is to be disregarded**

<i>Act</i>	<i>Provisions</i>
Public Health Act 1936	Sections 48, 79, 81, 82, 141, 259 and 261 <sup>M126</sup>
Water Act 1945	Section 18 <sup>M127</sup> so far as it continues to have effect by virtue of Schedule 2 to the Water Consolidation (Consequential Provisions) Act 1991 <sup>M128</sup> or by virtue of provisions of the Control of Pollution Act 1974 <sup>M129</sup> not having been brought into force.
Salmon and Freshwater Fisheries Act 1975	Section 4 <sup>M130</sup>
Building Act 1984	Section 59 <sup>M131</sup>
The Planning (Hazardous Substances) Act 1990 <sup>M132</sup>	The whole Act.
The 1990 Act	Part 3 <sup>M133</sup> (subject to regulation 47(3) of the Waste (England and Wales) Regulations 2011 <sup>M134</sup>

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	)
Water Industry Act 1991	Sections 72, 111 and 113(6) M135
	.
	In Part 4, Chapter 3 M136
	.
	In Schedule 8, paragraphs 2 to 4 M137
	so far as they re-enact provisions of sections 43 and 44 of the Control of Pollution Act 1974 M138
	.
The 1991 Act	Sections 82, 84, 92, 93, 161-161D, 190, 202 and 203 M139
	.
	In Schedule 25, paragraph 6 M140
	.
Clean Air Act 1993 M141	Section 16.
Marine and Coastal Access Act 2009 M142	Section 155.

### Marginal Citations

**M125** Section 98 was amended by [S.I. 2010/675](#).

**M126** [1936 c. 49](#); section 48 was amended by paragraph 2(1) of Schedule 1 and Part 1 of Schedule 3 to the [Water Consolidation \(Consequential Provisions\) Act 1991 \(c. 60\)](#). Section 79 is prospectively repealed by paragraph 7 of Schedule 3, and Schedule 4, to the [Control of Pollution Act 1974 \(c. 40\)](#) as from a day to be appointed. Section 82 was amended by paragraph 18(2) of Part 1 of Schedule 11 to the [London Government Act 1963 \(c. 33\)](#). Section 141 was amended by paragraph 4(2) of Schedule 15 to the 1990 Act. Section 259 was amended by Schedule 4 to the Control of Pollution Act 1974 and paragraph 4(3) of Schedule 15 to the 1990 Act.

**M127** [1945 c. 42](#); section 18 is prospectively repealed by Schedule 4 to the Control of Pollution Act 1974 as from a day to be appointed.

**M128** [1991 c. 60](#); Schedule 2 was amended by paragraph 29(3) of Part 2 of Schedule 7 to the [Water Act 2003 \(c. 37\)](#).

**M129** [1974 c. 40](#).

**M130** [1975 c. 51](#); section 4 was amended by section 233 (2)(a) of, and Part 5(B) of Schedule 22 to, the [Marine and Coastal Access Act 2009 \(c. 23\)](#), and by [S.I. 2013/755 \(W. 90\)](#).

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- M131** 1984 c. 55; section 59 was amended by Part 1 of Schedule 6 to the [Airports Act 1986 \(c. 31\)](#), [section 5\(b\)](#) of, and the Schedule to, the [Sustainable and Secure Buildings Act 2004 \(c. 22\)](#) and by S.I. 2001/3335, 4050, 2002/440 and 2011/2491. It is prospectively amended by paragraph 26(3) of Schedule 3 to the [Flood and Water Management Act 2010 \(c. 29\)](#) from a date to be appointed.
- M132** 1990 c. 10.
- M133** Part 3 was amended by Part 1 of Schedule 16 to the 1990 Act, paragraph 4 of Schedule 4, and Schedule 6, to the [Clean Air Act 1993 \(c. 11\)](#), [sections 2 to 5](#) and 10 of the [Noise and Statutory Nuisance Act 1993 \(c. 40\)](#), [paragraph 17\(5\)](#) of Schedule 9 to the [Local Government \(Wales\) Act 1994](#), paragraph 27 of Schedule 3 to the [Vehicle Excise and Registration Act 1994 \(c. 22\)](#), [paragraph 89\(2\)](#) and (3) of Schedule 22, and Schedule 24, to the 1995 Act, paragraphs 3 and 6 of Schedule 2 to the [Pollution Prevention and Control Act 1999 \(c. 24\)](#), and sections 86, 101, 102 and 103 of the [Clean Neighbourhoods and Environment Act 2005 \(c. 16\)](#), and by S.I. 2000/1973 and 2015/664. It is prospectively amended by Schedule 3 to the [Pollution Prevention and Control Act 1999](#) from a date to be appointed.
- M134** S.I. 2011/988, to which there are amendments not relevant to these Regulations.
- M135** 1991 c. 56; section 72 was amended by paragraph 21 of Schedule 8 to the [Water Act 2003](#) and paragraph 69 of Schedule 7 to the [Water Act 2014 \(c. 21\)](#). Section 111 was amended by paragraph 39(2) of Schedule 7 to the [Water Act 2003](#).
- M136** Chapter 3 of Part 4 was amended by paragraph 89(a) of Schedule 13 to the [Merchant Shipping Act 1995 \(c. 21\)](#), [paragraphs 105 to 113](#) of Schedule 22, and Schedule 24, to the 1995 Act, section 36(2) of the [Water Act 2003](#), and paragraph 1(2) of Part 1 of Schedule 11 to the [Constitutional Reform Act 2005 \(c. 4\)](#), and by S.I. 2000/1973, 2007/3538, 2010/675, 2011/1043 and 2013/755 (W. 90). It is prospectively amended by Schedule 3 to the [Pollution Prevention and Control Act 1999](#), by sections 88(1), (3) and (4) and 89 of, and Part 3 of Schedule 9 to, the [Water Act 2003](#), and by section 66(2) of the [Environment \(Wales\) Act 2016 \(anaw. 3\)](#) from a date to be appointed.
- M137** Paragraph 2 of Schedule 8 is prospectively amended by paragraph 123 of Schedule 7 to the [Water Act 2014](#) from a date to be appointed. Paragraphs 3 and 4 were amended by section 36(2) of the [Water Act 2003](#).
- M138** Section 43 was repealed by Part 1 of Schedule 3 to the [Water Consolidation \(Consequential Provisions\) Act 1991](#). Section 44 was repealed by Part 1 of Schedule 27 to the [Water Act 1989 \(c. 15\)](#) and Part 1 of Schedule 3 to the [Water Consolidation \(Consequential Provisions\) Act 1991](#).
- M139** Section 84 was amended by S.I. 2010/675 and 2013/755(W. 90). Section 92 was amended by paragraph 144 of Schedule 22 to the 1995 Act, and by S.I. 2010/675 and 2013/755 (W. 90). Section 93 was amended by S.I. 2009/3104 and 2013/755 (W. 90). Section 161 was substituted, together with sections 161ZA-161ZC, 161A, 161AA, 161AB, by S.I. 2009/3104. Sections 161, 161ZA, 161ZB, 161A and 161AA were amended by S.I. 2013/755 (W. 90). Sections 161ZC and 161AB were amended by S.I. 2010/675 and 2013/755 (W. 90). Sections 161B to 161D were inserted by paragraph 162 of Schedule 22 to the 1995 Act. Section 161B was amended by S.I. 2007/3538 and 2013/755 (W. 90). Sections 161D was amended by S.I. 2013/755 (W. 90) and 2015/664. Section 190 was amended by paragraph 169 of Schedule 22, and Schedule 24, to the 1995 Act, and by S.I. 2010/675 and 2013/755 (W. 90). Section 202 was amended by paragraph 172 of Schedule 22, and Schedule 24, to the 1995 Act. Section 203 was amended by paragraph 128 of Schedule 22 to the 1995 Act, paragraph 53(2) of Schedule 8 to the [Water Act 2003](#), and paragraph 125 of Schedule 7 to the [Water Act 2014](#), and by S.I. 2007/3538.
- M140** Paragraph 6 of Schedule 25 was amended by paragraph 26 of Schedule 15 to the 1995 Act, section 224 of, and paragraph 24 of Schedule 16, and Part 5(B) of Schedule 22, to, the [Marine and Coastal Access Act 2009](#), and by S.I. 2013/755 (W. 90).
- M141** 1993 c. 11.
- M142** 2009 c. 23.



## SCHEDULE 24

Regulation 35(1)

### Efficiency in heating and cooling energy: Energy Efficiency Directive

#### Interpretation

1.—(1) In this Schedule—

“cogeneration” means the simultaneous generation in one process of thermal energy and electrical or mechanical energy;

“connection distance” means—

- (a) in the case of a hot water link, the thermal capacity in kilowatts of the source or demand, whichever is smaller, multiplied by 0.0038, or
- (b) in the case of a steam heat link, the thermal capacity in kilowatts of the source or demand, whichever is smaller, multiplied by 0.0012,

expressed in kilometres;

“cost-benefit analysis” means a cost-benefit analysis in accordance with Part 2 to Annex IX to the Energy Efficiency Directive;

“economically justified demand” means demand that does not exceed the needs for heating or cooling and which would otherwise be satisfied at market conditions by energy generation processes other than cogeneration;

“high-efficiency cogeneration” means cogeneration meeting the criteria laid down in Annex II to the Energy Efficiency Directive;

“installation” means—

- (a) a stationary technical unit where one or more activities listed in Part 2 of Schedule 1 are carried on,<sup>F313</sup> ...
- (b) a small waste incineration plant<sup>F314</sup>; or
- (c) a medium combustion plant];

“relevant installation” means an installation carrying on—

- (a) an activity described in Part A(1) of Section 1.1 of Part 2 of Schedule 1,
- (b) an activity described in Part A(1) of Section 5.1 of Part 2 of Schedule 1,
- (c) an activity described in paragraph (a) of Part B of Section 1.1 of Part 2 of Schedule 1,<sup>F315</sup> ...
- (d) a small waste incineration plant operation<sup>F316</sup>; or
- (e) a medium combustion plant operation];

“substantially refurbished” means, subject to sub-paragraph (2)(e), a refurbishment the cost of which exceeds 50% of the investment cost for a new comparable energy plant.

(2) For the purposes of this Schedule—

- (a) the definition of “offshore platform” in paragraph 3 of Part A(1) of Section 1.1 of Part 2 of Schedule 1 also includes any structure where the principal purpose of the use of the structure is the establishment of the existence of petroleum or the appraisal of its characteristics, quality or quantity or the extent of any reservoir in which it occurs,
- (b) the definition of “petroleum” in paragraph 4 of Part A(1) of Section 1.1 of Part 2 of Schedule 1 also includes coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation,

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- (c) a reference to an installation means an installation which has a net rated thermal input exceeding 20 megawatts,
- (d) where two or more small waste incineration plants falling within Schedule 13 with an aggregate net thermal input exceeding 20 megawatts are operated on the same site by the same operator, those small waste incineration plants must be treated as a single installation with a rated thermal input exceeding 20 megawatts, and
- (e) refurbishment does not include the fitting of equipment to carry out the activity described in Part A(1) of Section 6.10 of Part 2 of Schedule 1.

#### Textual Amendments

- F313** Word in Sch. 24 para. 1(1) omitted (30.1.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **15(a)(i)**
- F314** Words in Sch. 24 para. 1(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **15(a)(ii)**
- F315** Word in Sch. 24 para. 1(1) omitted (30.1.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **15(b)(i)**
- F316** Words in Sch. 24 para. 1(1) inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, **15(b)(ii)**

#### Electricity generating installations

2.—(1) An application for the grant of an environmental permit under regulation 13(1) for a relevant installation which generates electricity must contain a cost-benefit analysis which assesses the cost and benefits of providing for the operation of the installation as a high-efficiency cogeneration installation.

(2) The regulator must exercise its relevant functions to ensure that an application for a variation of an environmental permit under regulation 20(1) is made before the energy plant of a relevant installation which generates electricity is substantially refurbished.

(3) The regulator must ensure that an application for a variation of an environmental permit required by sub-paragraph (2) contains (in addition to the information required by paragraph 2(1)(b) of Schedule 5) a cost-benefit analysis which assesses the cost and benefits of converting the relevant installation to high-efficiency cogeneration.

(4) The requirement for a cost-benefit analysis in sub-paragraph (1) or (3) does not apply to peak load and back-up electricity generating relevant installations for which the application for the grant or a variation of an environmental permit states that operation under 1,500 operating hours per year as a rolling average over a period of 5 years is planned.

(5) In the case of a relevant installation to which sub-paragraph (4) applies, the regulator must ensure that, if an environmental permit is granted or varied, it includes conditions ensuring that the operating hours for the installation remain within that constraint.

#### Installations generating waste heat

3.—(1) An application for the grant of an environmental permit under regulation 13(1) for an installation generating waste heat at a useful temperature level, other than a relevant installation falling within paragraph 2(1), must contain a cost-benefit analysis.

(2) The regulator must exercise its relevant functions to ensure that an application for a variation of an environmental permit under regulation 20(1) is made before the energy plant of an installation generating waste heat at a useful temperature level, other than a relevant installation falling within paragraph 2(2), is substantially refurbished.

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(3) The regulator must ensure that an application for a variation of an environmental permit under sub-paragraph (2) contains (in addition to the information required by paragraph 2(1)(b) of Schedule 5) a cost-benefit analysis.

(4) The cost-benefit analysis required by sub-paragraphs (1) and (3) must include an assessment of the cost and benefits of—

- (a) utilising the waste heat to satisfy economically justified demand, including through cogeneration, and
- (b) the connection of that installation to a district heating and cooling network.

### Heating and cooling networks

4.—(1) An application for the grant of an environmental permit under regulation 13(1) for a relevant installation which forms part of a new district heating and cooling network or existing district heating or cooling network, must contain a cost-benefit analysis.

(2) The regulator must exercise its relevant functions to ensure that an application for a variation of an environmental permit under regulation 20(1) is made before the energy plant of a relevant installation which forms part of a district heating and cooling network is substantially refurbished.

(3) An application for the variation of an environmental permit required by sub-paragraph (2) must contain (in addition to the information required by paragraph 2(1)(b) of Schedule 5) a cost-benefit analysis.

(4) The cost-benefit analysis required by sub-paragraphs (1) and (3) must include an assessment of the cost and benefits of utilising the waste heat from nearby installations.

### Thresholds

5. Paragraphs 3 and 4 do not apply to an installation, except an installation which forms part of a district cooling network, with any of the following—

- (a) available waste heat of 100 kilowatts or less;
- (b) available waste heat—
  - (i) greater than 100 kilowatts as hot water or steam, where there is no hot water heat demand greater than 100 kilowatts within the search radius from the installation as set out in the table below, and located within the connection distance from the centre of the installation, or
  - (ii) greater than 500 kilowatts as steam where there is no steam-based heat demand greater than 500 kilowatts and no hot water heat demand greater than 100 kilowatts within the search radius from the centre of the source installation as set out in the table below, and located within the connection distance from the centre of the source installation;
- (c) a heat demand of—
  - (i) 100 kilowatts or less for a hot water heat demand, or
  - (ii) 500 kilowatts or less for a steam-based heat demand;
- (d) a hot water heat demand greater than 100 kilowatts, with no source of available waste heat greater than 100 kilowatts within the search radius from the centre of the demand installation as set out in the table below, and located within the connection distance from the centre of the demand installation;
- (e) a steam-based heat demand greater than 500 kilowatts, with no source of steam-based waste heat greater than 500 kilowatts within the search radius from the centre of the

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installation as set out in the table below, and located within the connection distance from the centre of the demand installation.

**Search radius**

<i>Installation type</i>	<i>Thermal capacity of heat source/demand</i>	<i>Search radius (kilometres), measured from the centre of the installation</i>
Hot water demand	>100 kilowatts and <3.9 megawatts	$0.0038 \times H$ , where H = thermal capacity in kilowatts
	$\geq 3.9$ megawatts	15
Steam demand	>500 kilowatts and <12.5 megawatts	$0.0012 \times H$ , where H = thermal capacity in kilowatts
	$\geq 12.5$ megawatts	15
Waste heat source (hot water or steam)	>100 kilowatts and <3.9 megawatts	$0.0038 \times H$ , where H = thermal capacity in kilowatts
	$\geq 3.9$ megawatts	15

**Determination of applications**

6.—(1) When considering an application for an environmental permit, or for a variation of an environmental permit, in accordance with this Schedule, the regulator must take into account—

- (a) the outcome of the cost-benefit analysis carried out in accordance with this Schedule, and
- (b) the outcome of any comprehensive assessment carried out in accordance with [F317 regulation 4(2)(a) of the Energy Efficiency (Encouragement, Assessment and Information) Regulations 2014].

(2) Subject to sub-paragraph (4), where a cost-benefit analysis carried out in accordance with paragraphs 2(1), 2(3) and 3(4) shows that benefits exceed costs, the regulator must ensure that any environmental permit that is granted or varied includes appropriate conditions that will ensure the operation of the installation in a manner shown by that analysis to be cost beneficial.

(3) Subject to sub-paragraph (4), where a cost-benefit analysis carried out in accordance with paragraph 4(4) shows that benefits exceed costs, the regulator must ensure that any environmental permit that is granted or varied contains appropriate conditions that will ensure the operation of the installation, in conjunction with the utilisation of the waste heat from nearby installations, in a manner shown by that analysis to be cost beneficial.

(4) Where the cost-benefit analysis carried out in accordance with paragraph 2(1), 2(3), 3(4) or 4(4) shows that benefits exceed costs, the requirement to impose appropriate conditions in accordance with sub-paragraphs (2) and (3) does not apply if, in individual cases, the regulator decides that there are imperative reasons of law, ownership or finance for them not to apply.

(5) The regulator must within 2 months of its decision under sub-paragraph (4) submit a reasoned notification of that decision to the appropriate authority.

(6) This Schedule does not apply to—

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- (a) installations that need to be located close to a geological storage site approved under [<sup>F318</sup>Chapter 3 of Part 1 of the Energy Act 2008 and other EU-derived domestic legislation which transposed Directive 2009/31/EC on the geological storage of carbon dioxide in relation to England and Wales];
  - (b) any relevant installation within a nuclear site, within the meaning given in paragraph 1 of Part 2 of Schedule 23, and which is dedicated to the production of nuclear power;
  - (c) mobile plant.
- (7) Nothing in this Schedule affects the application of the Industrial Emissions Directive to installations.

#### Textual Amendments

- F317** Words in Sch. 24 para. 6(1)(b) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(25)(a); 2020 c. 1, Sch. 5 para. 1(1)
- F318** Words in Sch. 24 para. 6(6)(a) substituted (31.12.2020) by The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/39), regs. 1, 2(25)(b); 2020 c. 1, Sch. 5 para. 1(1)

#### Aggregation of rated thermal input – existing installations

7.—(1) This paragraph applies to a Part B installation that is a regulated facility solely as a result of the aggregation of the net rated thermal input of two or more appliances in accordance with paragraph 2 of Part B of Section 1.1 of Part 2 of Schedule 1.

(2) A Part B installation that was in operation immediately prior to 21st March 2015 is taken to be an exempt facility for the purposes of regulation 8(2).

(3) Sub-paragraph (2) ceases to apply to a Part B installation (so that it is no longer taken to be an exempt facility) if, after 21st March 2015, the energy plant of the Part B installation is substantially refurbished.

#### Existing applications for the grant or variation of an environmental permit

8.—(1) This Schedule does not apply to an existing application.

(2) In sub-paragraph (1), “existing application” mean a duly made application received by the regulator prior to 21st March 2015—

- (a) for the grant of an environmental permit pursuant to regulation 13, or
- (b) for the variation of an environmental permit pursuant to regulation 20(1).

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## SCHEDULE 25

Regulation 35(1)

## Flood risk activities and excluded flood risk activities

**PART 1**

## Flood risk activities

**Application**

1. This Schedule applies in relation to every flood risk activity.

**Interpretation**

- 2.—(1) In this Schedule—

“application” has the meaning given in paragraph 1 of Schedule 5;

“drainage” has the meaning given in section 113(1) of the 1991 Act <sup>M143</sup> and “drainage work” is to be construed accordingly;

“emergency” means an occurrence which presents a risk of—

- (a) serious flooding;
- (b) serious detrimental impact on drainage;
- (c) serious harm to the environment;

“flood defence structure” means any permanent works constructed, operated or maintained by the regulator for the purposes of managing flood risk;

“land” includes—

- (a) water;
- (b) land covered by water;

“main river” has the meaning given in section 113(1) of the 1991 Act <sup>M144</sup>;

“navigation authority” means any person who has a duty or power under any enactment to work, maintain, conserve, improve or control any canal or other inland navigation, navigable river, estuary, harbour or dock;

“non-tidal main river” means any part of a main river that is not a tidal main river;

“tidal main river” means that part of a main river downstream of the normal tidal limit;

“unauthorised flood risk activity” means a flood risk activity which is not authorised by an environmental permit but excluding any exempt or excluded flood risk activities;

“watercourse” has the meaning given in section 221 of the 1991 Act <sup>M145</sup>, as read with section 113(1) of that Act.

- (2) In this Schedule—

- (a) except in the definition of “sea defence” in paragraph 3, “bank” means any bank, berm, wall or embankment that adjoins or confines any watercourse and includes the side of the bank that stretches down to the mean low-water mark (in the case of a watercourse in which tidal waters flow) or to the bed of the watercourse (in any other case);
- (b) for the purposes of paragraph (a), in the case of a watercourse in which tidal waters flow, the bank includes any wall or embankment constructed or maintained by the regulator in the sea or an estuary for the purposes of or in connection with a river;

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- (c) any reference to a distance of 8 metres or 16 metres from a river is a reference to that distance as measured horizontally from the foot of the bank on the landward side of the river;
- (d) any reference to a distance of 8 metres or 16 metres from any flood defence structure or culvert is a reference to that distance as measured from the foot of the flood defence structure or from the outside edge of the culvert, as the case may be.

#### Marginal Citations

**M143** The definition of “drainage” was amended by section 100(1) of, and Schedule 24 to, the 1995 Act.

**M144** The definition of “main river” was amended by section 59(3) of the [Water Act 2014 \(c. 21\)](#).

**M145** The definition of “watercourse” was amended by paragraph 128 of Schedule 22 to the 1995 Act, section 59(4)(b) of the Water Act 2014, and by [S.I. 2013/755 \(W. 90\)](#).

#### Meaning of “flood risk activity”

- 3.—(1) Subject to sub-paragraph (2), a “flood risk activity” means—
- (a) erecting any structure (whether temporary or permanent) in, over or under a main river;
  - (b) the carrying out of any work of alteration or repair on any structure (whether temporary or permanent) in, over or under a main river if the work is likely to affect the flow of water in the main river or to affect any drainage work;
  - (c) erecting or altering any structure (whether temporary or permanent) designed to contain or divert the floodwaters of any part of a main river;
  - (d) any dredging, raising or taking of any sand, silt, ballast, clay, gravel or other materials from or off the bed or banks of a main river (or causing such materials to be dredged, raised or taken), including hydrodynamic dredging and desilting;
  - (e) any activity which is likely to divert the direction of the flow of water into or out of a main river or alter the level of water in a main river;
  - (f) any activity within 8 metres of a non-tidal main river (or within 8 metres of any flood defence structure or culvert on that river) or any activity within 16 metres of a tidal main river (or within 16 metres of any flood defence structure or culvert on that river) which is likely to—
    - (i) cause damage to or endanger the stability of the banks of that river or of any culvert,
    - (ii) cause damage to any river control works,
    - (iii) alter, reconstruct, discontinue or remove any river control works,
    - (iv) divert or obstruct flood waters or affect the drainage of that river, or
    - (v) interfere with the regulator's access to or along that river;
  - (g) any activity (other than an allowed activity) on a flood plain that is—
    - (i) more than 8 metres from a non-tidal main river or more than 16 metres from a tidal main river, or
    - (ii) more than 8 metres from any flood defence structure or culvert on a non-tidal main river or more than 16 metres from any flood defence structure or culvert on a tidal main river,which is likely to divert or obstruct floodwaters, to damage any river control works or to affect drainage;
  - (h) any activity within 16 metres of the base of a sea defence which is likely to—

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- (i) endanger the stability of, cause damage to or reduce the effectiveness of that sea defence, or
  - (ii) interfere with the regulator's access to or along that sea defence;
  - (i) any activity within 8 metres of the base of a remote defence which is likely to—
    - (i) endanger the stability of, cause damage to or reduce the effectiveness of that defence, or
    - (ii) interfere with the regulator's access to or along that defence;
  - (j) any quarrying or excavation within 16 metres of the base of a remote defence which is likely to cause damage to or endanger the stability of that defence;
  - (k) any quarrying or excavation within 16 metres of a main river or any flood defence structure or culvert on that river which is likely to cause damage to or endanger the stability of the banks of that river.
- (2) The following paragraphs of sub-paragraph (1) are excluded from the definition of flood risk activity in respect of a statutory function to which this sub-paragraph applies—
- (a) in respect of England, paragraphs (d) to (k);
  - (b) in respect of Wales, paragraphs (e) to (k).
- (3) Sub-paragraph (2) applies to a statutory function—
- (a) exercisable by a person carrying on an undertaking referred to in paragraph 1(4) of Schedule 22 to the 1991 Act, as read with sub-paragraphs (4A) and (5) of that paragraph<sup>M146</sup>, or
  - (b) relating to the management of flood risk exercisable by a risk management authority within the meaning of section 6(13) of the Flood and Water Management Act 2010<sup>M147</sup>.
- (4) In this paragraph—
- “allowed activity” means—
- (a) any activity that has been granted planning permission by a local planning authority or the Secretary of State under the Town and Country Planning Act 1990<sup>M148</sup>, a certificate under section 191 of that Act or an established use certificate under section 192 of that Act, as originally enacted<sup>M149</sup>, which continues to have effect for the purposes of subsection (4) of section 192, or
  - (b) the construction of hay or straw stacks, clamps or manure (or similar) heaps, in accordance with accepted agricultural practice;
- “conservancy authority” means any person who has a duty or power under any enactment to conserve, maintain or improve the navigation of a tidal water and is not a navigation or harbour authority;
- “culvert” means a covered channel or pipe which prevents the obstruction of a main river or drainage path by an artificial construction;
- “harbour authority” has the meaning given in section 313 of the Merchant Shipping Act 1995<sup>M150</sup>, other than a navigation authority;
- “remote defence” means any berm, wall or embankment that is constructed for the purposes of preventing or alleviating flooding from, or in connection with, any main river, other than any berm, wall or embankment which is a bank within the meaning of paragraph 2(2);
- “river control works” means any structure or appliance used for measuring or regulating—
- (a) the level of water in a main river,
  - (b) the flow of water in, into or out of, a main river, or



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- (c) the drawing of water from, or the delivering of water into, a main river, and includes any sluices, flood gates, lashers, valves, paddles, penstocks, locks, weirs, dams, pumps, pumping machinery and pipes;
- “sea defence” includes any bank, wall, embankment (and any berm, counterwall or cross-wall connected to any such bank, wall or embankment), barrier, tidal sluice and other defence, whether natural or artificial, against the inundation of land by sea water or tidal water, including natural or artificial high ground which forms part of or makes a contribution to the efficiency of the defences of the regulator's area against flooding, but excludes any sea defence works which are for the time being maintained by a coast protection authority under the provisions of the Coast Protection Act 1949 <sup>M151</sup> or by any local authority or any navigation, harbour or conservancy authority.

#### Marginal Citations

- M146** Paragraph 1 of Schedule 22 was amended by paragraph 43(1) of Schedule 9 to the [Coal Industry Act 1994 \(c. 21\)](#), [paragraph 15](#) of Schedule 5 to the [Transport Act 2000 \(c. 38\)](#), [paragraph 114\(2\)](#) of Schedule 17 to the [Communications Act 2003 \(c. 21\)](#), [paragraph 18](#) of Schedule 19 to the [Energy Act 2004 \(c. 20\)](#), [paragraph 138](#) of Part 3 of Schedule 12 to the [Postal Services Act 2011 \(c. 5\)](#), and by S.I. 2001/1149 and 2013/755 (W. 90).
- M147** [2010 c.29](#); section 6(13) was amended by S.I. 2013/755 (W. 90).
- M148** [1990 c. 8](#).
- M149** Sections 191 and 192 were substituted by section 10(1) of the [Planning and Compensation Act 1991 \(c. 34\)](#).
- M150** [1995 c. 21](#); the definition of “harbour authority” was substituted by paragraph 19(2)(a) of Schedule 6 to the [Merchant Shipping and Maritime Security Act 1997 \(c. 28\)](#).
- M151** [1949 c. 74](#).

#### Excluded flood risk activities

4. An “excluded flood risk activity” means a flood risk activity that—
- falls within a description in Part 2 of this Schedule, and
  - satisfies the conditions specified in Part 2 of this Schedule for an activity of that description.

#### Exercise of relevant functions

5. The regulator must exercise its relevant functions for the purposes of achieving the following objectives—
- managing flood risk;
  - managing impacts on land drainage;
  - environmental protection.

#### Conditions for operation and maintenance of structures and works

6. Without prejudice to its powers to grant an application subject to such conditions as it sees fit, the regulator may grant an application subject to such conditions relating to—
- the operation and maintenance of such structure or works as the regulator considers to be necessary—
    - to manage impacts on land drainage,

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- (ii) to manage flood risk, or
- (iii) to secure environmental protection;
- (b) access by the regulator to any structure, works or watercourse, including access to any surrounding land where this is necessary to access the structure, works or watercourse.

### Emergency works notice

7.—(1) In an emergency, the regulator may serve an emergency works notice on the operator, owner or occupier of the premises or any other person responsible for a flood risk activity (“A”).

(2) An emergency works notice may be served whether or not the activity is an excluded or an exempt flood risk activity.

(3) An emergency works notice may require A—

- (a) to remove any specified structure in accordance with requirements set out in the notice;
- (b) to modify any specified structure in accordance with requirements set out in the notice;
- (c) to carry on the activity in accordance with requirements set out in the notice;
- (d) to remedy the environmental effects caused by the activity in accordance with requirements set out in the notice;
- (e) not to carry on the activity without an environmental permit, unless the activity is an excluded or exempt activity.

(4) An emergency works notice must—

- (a) specify the period within which A must comply with the notice requirements;
- (b) set out the rights of appeal that A has under regulation 31(1)(f).

(5) In sub-paragraph (3)(d), “environmental effects” means—

- (a) flooding or risk of flooding;
- (b) harm to the environment or risk of harm to the environment;
- (c) detrimental impact on drainage or risk of detrimental impact on drainage.

### Remediation notice

8.—(1) Where the regulator considers that an unauthorised flood risk activity is being or has been carried on, it may serve a remediation notice on the operator, owner or occupier of the premises or any other person responsible for the unauthorised flood risk activity (“A”).

(2) The remediation notice must—

- (a) state the regulator's view under sub-paragraph (1);
- (b) specify the steps that must be taken by A;
- (c) specify the period within which those steps must be taken;
- (d) set out the rights of appeal that A has under regulation 31(1)(f).

(3) Steps that may be specified in the remediation notice include steps—

- (a) to cease carrying on the activity;
- (b) to carry on the activity in a particular manner;
- (c) to remove or reduce flood risk;
- (d) to remedy detrimental impact on drainage;
- (e) to remedy harm to the environment;

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- (f) to restore the main river to its previous condition or a condition otherwise specified in the notice.
- (4) Where—
  - (a) the regulator has served a notice on A, but A does not comply with the remediation notice within the time specified in the notice, or
  - (b) the regulator determines that it is not possible or practical to serve a remediation notice on A,

the regulator may serve a remediation notice on any other person who appears to the regulator to have the necessary authority to take the steps specified in the notice.

(5) Where a notice is served under sub-paragraph (4), sub-paragraphs (2) and (3) apply as if the references in those sub-paragraphs to “A” are references to the person on whom a notice under sub-paragraph (4) is served.

### **Regulator's power to take steps to remove and remedy etc.**

- 9.—(1) Subject to paragraph 10(4) and (5), the regulator may take steps to—
- (a) remove, alter or pull down any works carried out pursuant to an unauthorised flood risk activity;
  - (b) remedy the effects caused by an unauthorised flood risk activity.
- (2) Before taking any steps under sub-paragraph (1) the regulator must serve a notice of intent on the person responsible for the unauthorised flood risk activity (“A”).
- (3) The requirement to serve a notice of intent under sub-paragraph (2) does not apply where the regulator—
- (a) is required to act in an emergency, or
  - (b) cannot determine who is the person responsible for the unauthorised flood risk activity.
- (4) A notice of intent must—
- (a) specify the steps the regulator intends to take;
  - (b) specify the date on which the regulator intends to take those steps;
  - (c) set out the rights of appeal that A has under regulation 31(1)(f).
- (5) Where the regulator determines that it is not possible or practical to serve a notice of intent on A, the regulator may serve the notice on any other person who it appears to the regulator may be affected.
- (6) Where a notice is served under sub-paragraph (5), sub-paragraph (4)(c) applies as if the reference in that sub-paragraph to “A” is a reference to the person on whom a notice under sub-paragraph (5) is served.
- (7) The regulator may recover from A, or a person served with a notice under sub-paragraph (5), the costs of any steps taken by the regulator under sub-paragraph (1).

### **Protected undertakings, railways and bridges**

10.—(1) For the purposes of this paragraph, “protected undertaking” means the undertakings referred to in paragraph 1(4) of Schedule 22 to the 1991 Act, as read with sub-paragraphs (4A) and (5) of that paragraph.

(2) The regulator must not exercise its functions under these Regulations in relation to any flood risk activity in a manner that prejudices the exercise of any statutory power, authority or jurisdiction by a person carrying on a protected undertaking.

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(3) Sub-paragraph (2) does not have the effect of exempting any person carrying on a protected undertaking from the requirement to hold an environmental permit.

(4) The regulator must obtain the consent of the person carrying on a protected undertaking where—

- (a) the regulator is proposing to take steps under paragraph 9(1) that will directly or indirectly interfere with works or property (or with the use of works or property) vested in, or under the control of, a person carrying on that undertaking, and
- (b) that interference will adversely affect those works, that property (or with the use of those works or that property) or the carrying on of that undertaking.

(5) Sub-paragraph (4) does not apply where the regulator is required to act in an emergency but, in such a case, the regulator must notify the person carrying on the protected undertaking as soon as possible of any steps that have been taken under paragraph 9(1).

(6) Without prejudice to the preceding provisions of this paragraph, nothing in these Regulations that relates to a flood risk activity authorises any person, except with the consent of the railway company in question, to interfere with—

- (a) any railway bridge or any other work connected with a railway, or
- (b) the structure, use or maintenance of a railway or the traffic on it.

(7) Where consent is required under sub-paragraph (4) or (6), the consent may be subject to reasonable conditions but must not be unreasonably withheld.

(8) There must be a referral to the arbitration of a single arbitrator, to be appointed by agreement between the parties to the dispute or, in default of agreement, by the President of the Institution of Civil Engineers<sup>M152</sup>, of any dispute as to whether—

- (a) anything done or proposed to be done interferes or will interfere as mentioned in sub-paragraphs (4) and (6);
- (b) any consent for the purposes of this paragraph is being unreasonably withheld;
- (c) any condition subject to which any such consent has been given is reasonable.

(9) Nothing in this Schedule affects any enactment requiring the consent of any government department, Minister or Welsh Minister for the erection of a bridge, or any powers exercisable by any government department, Minister or Welsh Minister in relation to a bridge.

**Marginal Citations**

M152 Registered charity number 210252.

## PART 2

### Excluded flood risk activities

#### SECTION 1

##### Introductory

1.—(1) The descriptions in this Part are set out in paragraphs 2 to 13, in their respective first sub-paragraphs.

(2) The specific conditions relating to each description in this Part are set out in paragraphs 2 to 13, in their respective second sub-paragraphs.

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(3) The general condition for the descriptions in paragraphs 3 to 13 of this Part is that the activity is not carried out in, or (where the activity is carried out in Wales) within 100 metres of, a water body in Wales that is part of a main river classified as of high morphological status by the NRBW in accordance with the relevant directions.

(4) For the purposes of paragraphs 3 and 4, “licensable marine activity” and “marine licence” have the same meaning as in Part 4 of the Marine and Coastal Access Act 2009<sup>M153</sup>.

(5) For the purposes of this Part, “relevant directions” means the Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015<sup>M154</sup>.

#### Marginal Citations

**M153** 2009 c. 23; Part 4 was amended by section 76(2) of the [Energy Act 2016 \(c. 20\)](#) and by [S.I. 2011/405](#), 1043, 1210, 2015/374, 664 and 2016/738. It is prospectively amended by sections 76 to 80 of the Environment (Wales) Act 2016 (anaw. 3) from a date to be appointed.

**M154** These Directions were made on 9th September 2015 in exercise of powers in section 40(2) of the 1995 Act and are available at [http://www.legislation.gov.uk/uksi/2015/1623/pdfs/uksiod\\_20151623\\_en.pdf](http://www.legislation.gov.uk/uksi/2015/1623/pdfs/uksiod_20151623_en.pdf). A copy may be obtained from the Flood Risk Management Team, the Department for Environment, Food and Rural Affairs, Area 3C, Nobel House, 17 Smith Square, London SW1P 3JR.

## SECTION 2

### *Descriptions and conditions*

#### **Emergency activity**

2.—(1) Any activity carried on in an emergency.

(2) For the purposes of this paragraph, the specific conditions are that—

- (a) the activity is not a pre-planned emergency activity, and
- (b) the person carrying on the activity provides the regulator with notice in writing as soon as practicable of the carrying on of the activity and the circumstances in which it was carried on.

(3) For the purposes of sub-paragraph (2)(a), a “pre-planned emergency activity” means any activity which has been planned in response to an emergency before it occurs.

(4) The power of the regulator to serve a remediation notice under paragraph 8 of Part 1 of this Schedule applies where an activity has been carried on in reliance on this exclusion as if that activity were an unauthorised activity.

#### **A licensable marine activity in England**

3.—(1) A licensable marine activity in England.

(2) For the purposes of this paragraph, the specific conditions are that—

- (a) an application for a marine licence has been made in respect of that activity,
- (b) the Agency has received notice that the application has been made,
- (c) in view of the terms and conditions that will be included in the marine licence, the Agency considers that an environmental permit is not necessary, and
- (d) a notice to that effect has been issued by the Agency to the applicant.

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## A licensable marine activity in Wales

4.—(1) A licensable marine activity in Wales.

(2) For the purposes of this paragraph, the specific condition is that an application for a marine licence has been made in respect of that activity.

## [<sup>F319</sup>Ladders, scaffold towers and other similar apparatus]

5.—(1) The erection and use of ladders<sup>F320</sup>, scaffold towers and other similar apparatus used for access, maintenance or repair] (“equipment”).

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the suitability of river conditions is reviewed by the operator each working day,
- (b) the equipment is erected on each working day on which it is required, and
- (c) the equipment is removed at the end of each working day and is stored outside the river and its banks.

### Textual Amendments

**F319** Sch. 25 Pt. 2 para. 5 heading substituted (7.1.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(1), **4(7)(a)**

**F320** Words in Sch. 25 Pt. 2 para. 5(1) substituted (7.1.2019) by [The Environmental Protection \(Miscellaneous Amendments\) \(England and Wales\) Regulations 2018 \(S.I. 2018/1227\)](#), regs. 2(1), **4(7)(b)**

## Service crossings within an existing structure

6.—(1) The construction and use of service crossings within an existing structure.

(2) For the purposes of this paragraph, the specific conditions are—

- (a) the crossing is entirely within the original profile of the existing structure,
- (b) the regulator has not sent a notification to the landowner that the structure has been identified for removal or modification in order to achieve the [<sup>F321</sup>environmental objectives in relation to a river basin district],
- (c) equipment associated with the works is not stored on the bed or banks of the main river, and
- (d) no works are carried out from the main river or from the banks of the main river.

### Textual Amendments

**F321** Words in Sch. 25 Pt. 2 para. 6(2)(b) substituted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(26)**; 2020 c. 1, Sch. 5 para. 1(1)

## Flood protection devices attached to buildings

7.—(1) The attachment of a flood protection device directly to a building in order to protect the interior of that building.

(2) For the purposes of this paragraph, the specific condition is that the flood protection provided by the device extends only to the building to which the device is fitted.

### Minor works on or affecting bridges and culverts

8.—(1) The carrying out of minor works on or affecting bridges and culverts for highways and public rights of way (“minor works”).

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the minor works do not affect, or have the potential to affect, the bed, banks, water level, normal flow or flood flow in the main river,
  - (b) equipment associated with the minor works is not stored on the bed or banks of the main river, and
  - (c) no works are carried out from the main river or from the banks of the main river.

### Fencing

9.—(1) The erection of fencing.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the fencing is not located on the bed or banks of the main river, and
  - (b) the fencing is constructed of—
    - (i) post and rail,
    - (ii) post and wire mesh of at least 100 mm spacing, or
    - (iii) post and wire strands.

### Fish traps

10.—(1) The temporary use of fish traps.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the trap has dimensions of no greater than 2 metres x 1 metre x 0.75 metre,
  - (b) any trap, or combination of traps, placed in the main river is less than one third of the width of the channel,
  - (c) the trap is not used when the main river is in a condition of high flow, and
  - (d) the trap is located more than 50 metres upstream or downstream from any dam or other obstruction.

### Notice boards

11.—(1) Erection of notice boards.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) the board is attached to existing fencing or freestanding, permanent posts,
  - (b) the board is more than 2 metres from any culvert, remote defence or flood defence structure on the main river and from any sea defence, and
  - (c) the board is more than 2 metres from the landward side of the bank.

### Purpose-built sediment traps

12.—(1) Clearance of purpose-built sediment traps.

- (2) For the purposes of this paragraph, the specific conditions are—
- (a) only sand and silt is cleared from the trap,
  - (b) the works do not result in sand or silt being transmitted downstream, and

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- (c) where the sand and silt from the clearance is spread on the floodplain, it is spread to a depth of no more than 100mm and no closer than 8 metres from the landward side of either bank.

### Site investigation boreholes and trial pits

- 13.—(1) Site investigation boreholes and trial pits within a flood plain.
- (2) For the purposes of this paragraph, the specific conditions are—
- the works are more than 5 metres from any culvert, remote defence or flood defence structure on the main river and from any sea defence,
  - the works are more than 8 metres from the banks of a non-tidal main river,
  - the works are more than 16 metres from the banks of a tidal main river, and
  - the works are completed, including refilling of the borehole or pit, within 48 hours.

[<sup>F322</sup>SCHEDULE 25A

Regulation 35(1)

### Medium Combustion Plants: Medium Combustion Plant Directive

#### Textual Amendments

**F322** Schs. 25A, 25B inserted (30.1.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, 16

## PART 1

### General

#### Application

1. This Schedule applies—
- in relation to every new medium combustion plant from 20th December 2018,
  - in relation to every existing medium combustion plant from the date specified in regulation 12(1A)(b) or (c), as appropriate.

#### Interpretation

- 2.—(1) In this Schedule—
- “existing medium combustion plant” means a medium combustion plant—
- put into operation before 20th December 2018, or
  - for which an environmental permit was granted before 19th December 2017, provided that the plant is put into operation no later than 20th December 2018;
- “the MCPD” means the Medium Combustion Plant Directive;
- “medium combustion plant” means a combustion plant with a rated thermal input equal to or greater than 1 megawatt but less than 50 megawatts, and any combination of combustion plants referred to in article 2(2) or article 4 of the MCPD, provided that—
- it does not fall within Article 2(3) or (4) of the MCPD,



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- (b) it is not installed on an offshore platform situated on, above or below those parts of the sea adjacent to England and Wales from the low water mark to the seaward baseline of the United Kingdom territorial sea,
- (c) it is not installed on a gas storage or unloading platform as defined in regulation 2 of the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013; “new medium combustion plant” means a medium combustion plant which is not an existing medium combustion plant.

(2) In sub-paragraph (1), “offshore platform” means any fixed or floating structure which—

- (a) is used for the purposes of or in connection with the production of petroleum, and
- (b) in the case of a floating structure, is maintained on a station during the course of production,

but does not include any structure where the principal purpose of the use of the structure is the establishment of the existence of petroleum or the appraisal of its characteristics, quality or quantity or the extent of any reservoir in which it occurs.

(3) In sub-paragraph (2), “petroleum” includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.

<sup>F323</sup>(4) .....

**Textual Amendments**

**F323** Sch. 25A Pt. 1 para. 2(4) omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(27)(a)**; 2020 c. 1, Sch. 5 para. 1(1)

**Applications for the grant of an environmental permit**

**3.—**(1) The regulator must ensure that every application for the grant of an environmental permit—

- (a) includes the information specified in Annex I to the MCPD;
- (b) specifies which (if any) of paragraphs 7 to 11 of this Schedule is considered relevant to the application.

(2) Subject to sub-paragraph (3), the regulator must start the procedure for determining an application for the grant of an environmental permit within one month of the operator providing the information referred to in paragraph (1) and must inform the operator of the start of the procedure.

(3) Sub-paragraph (2) applies only when the operator has submitted a duly made application.

**Exercise of relevant function**

**4.—**(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the MCPD—

- (a) Article 4;
- (b) Article 5(1) and (2);
- (c) Article 5(6);
- (d) Article 6(1);
- (e) Article 6(2);

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- (f) Article 6(7);
- (g) Article 6(13);
- (h) Article 7 (except Article 7(8));
- (i) Article 8(2) and (3);
- (j) Article 9.

(2) In exercising its relevant functions, the regulator must ensure that there is no persistent emission of dark smoke, where “dark smoke” has the meaning given in section 3(1) of the Clean Air Act 1993.

(3) In exercising its relevant functions so as to ensure compliance with Article 6(1), (2), (7) or (13) of the MCPD, the regulator must ensure that environmental permits include emission limit values set in accordance with the provisions of Part 2 of this Schedule.

## PART 2

### Emission Limit Values

#### Interpretation of this Part

5. In this Part—

<sup>F324</sup> .....

“Annex I” means Annex I of the MCPD;

“Annex II” means Annex II of the MCPD;

“biomass”, “dust”, “emission limit value”, “micro isolated system”, “nitrogen oxides”, “operating hours”, [<sup>F325</sup>and] “small isolated system” <sup>F326</sup>... have the respective meanings given in article 3 of the MCPD;

any reference to emissions expressed in mg/Nm<sup>3</sup> is to those emissions defined in accordance with the first paragraph of Annex II.

#### Textual Amendments

- F324** Words in Sch. 25A Pt. 2 para. 5 omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(27)(b)(i)**; 2020 c. 1, Sch. 5 para. 1(1)
- F325** Word in Sch. 25A Pt. 2 para. 5 inserted (31.12.2020) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(27)(b)(ii)**; 2020 c. 1, Sch. 5 para. 1(1)
- F326** Words in Sch. 25A Pt. 2 para. 5 omitted (31.12.2020) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) \(EU Exit\) Regulations 2019 \(S.I. 2019/39\)](#), regs. 1, **2(27)(b)(iii)**; 2020 c. 1, Sch. 5 para. 1(1)

#### Emission limit values

6.—(1) Sub-paragraphs (2) to (4) apply, subject to paragraphs 7 to 11.

(2) From 20th December 2018, emission limit values applicable to a new medium combustion plant, for emissions into the air of sulphur dioxide, nitrogen oxides and dust, are the corresponding emission limit values set out in Part 2 of Annex II (but with the modification that footnote (3) in Table 2 of that Part is to be read as if for “may be” there were substituted “are”).

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(3) From 1st January 2025, emission limit values applicable to an existing medium combustion plant with a rated thermal input greater than 5 megawatts, for emissions into the air of sulphur dioxide, nitrogen oxides and dust, are the corresponding emission limit values set out in Tables 2 and 3 of Part 1 of Annex II.

(4) From 1st January 2030, emission limit values applicable to an existing medium combustion plant with a rated thermal input of less than or equal to 5 megawatts, for emissions into the air of sulphur dioxide, nitrogen oxides and dust, are the corresponding emission limit values set out in Tables 1 and 3 of Part 1 of Annex II.

### **Limited operating hours – existing medium combustion plants**

7.—(1) An existing medium combustion plant which operates for no more than 500 operating hours per year, as a rolling average over a period of five years, is not required to comply with the emission limit values set out in Tables 1, 2, and 3 of Part 1 of Annex II, provided that the operator has signed a declaration in accordance with paragraph 7 of Annex I.

(2) An existing medium combustion plant is not required to comply with the emission limit values set out in Tables 1, 2, and 3 of Part 1 of Annex II where it operates for no more than 1,000 operating hours per year, as a rolling average over a period of five years to—

- (a) provide backup power production in islands connected to an electricity transmission system or distribution system, in the event of an interruption of the main power supply to an island; or
- (b) produce heat in cases of exceptionally cold weather events,

provided that the operator has signed a declaration in accordance with paragraph 7 of Annex I.

(3) Subject to sub-paragraph (4), where an existing medium combustion plant firing solid fuels falls within sub-paragraph (1) or sub-paragraph (2), an emission limit value for dust of 200mg/Nm<sup>3</sup> applies.

(4) In the case of an existing medium combustion plant falling within sub-paragraph (2)(b), the emission limit value for dust in sub-paragraph (3) only applies during any period which has been notified by the appropriate authority to the regulator as an exceptionally cold weather event.

(5) For the purposes of sub-paragraph (2)(a), “transmission system” and “distribution system” have the meanings given in section 4(4) of the Electricity Act 1989.

### **Limited operating hours - new medium combustion plants**

8.—(1) A new medium combustion plant which operates for no more than 500 operating hours per year, as a rolling average over a period of three years, is not required to comply with the emission limit values set out in Part 2 of Annex II, provided that the operator has signed a declaration in accordance with paragraph 7 of Annex I.

(2) Where a new medium combustion plant firing solid fuels falls within sub-paragraph (1), an emission limit value for dust of 100mg/Nm<sup>3</sup> applies.

### **Small and micro isolated systems – existing medium combustion plants**

9. Existing medium combustion plants which are part of a small isolated system or a micro isolated system are only required to comply with the emission limit values set out in Tables 1, 2 and 3 of Part 1 of Annex II from 1st January 2030.

### **Plant at gas compressor stations – existing medium combustion plants**

10. An existing medium combustion plant—

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- (a) with a rated thermal input greater than 5 megawatts; and
- (b) which is used to drive gas compressor stations required to ensure the safety and security of a national gas transmission system,

is only required to comply with the emission limit values for nitrogen oxides set out in Table 3 of Part 1 of Annex II from 1st January 2030.

### Temporary derogations – existing and new medium combustion plants

**11.**—(1) This sub-paragraph applies in relation to a medium combustion plant which normally uses low sulphur fuel, where the operator is unable to comply with the relevant emission limit values for sulphur dioxide in paragraph 6 because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

(2) Where sub-paragraph (1) applies, the regulator may grant a derogation from the obligation to comply with those emission limit values for such period, up to a maximum of six months, as the operator satisfies the regulator is justified under the circumstances.

(3) This sub-paragraph applies in relation to a medium combustion plant using only gaseous fuel where—

- (a) the plant has to resort exceptionally to the use of other fuels because of an interruption in the supply of gas; and
- (b) as a result of using those other fuels, the plant would need to be equipped with secondary abatement equipment in order to comply with the relevant emission limit values for sulphur dioxide, nitrogen oxides and dust in paragraph 6.

(4) Where sub-paragraph (3) applies, the regulator may grant a derogation from the obligation to comply with the relevant emission limit values in paragraph 6—

- (a) for a maximum of 10 days; or
- (b) for such longer period as the operator satisfies the regulator is justified under the circumstances.

(5) Where the regulator grants a derogation under sub-paragraph (2) or (4), the regulator must inform the appropriate authority immediately.

## SCHEDULE 25B

Regulation 35(1)

### Specified generators

#### Application

1. This Schedule applies in relation to every specified generator from the permitting date.

#### Interpretation – specified generators

- 2.—(1) In this Schedule—

“generator” means any combustion plant which is used for the purpose of generating electricity, but does not include any generator that is mobile unless it is connected to—

- (a) an electricity transmission system or distribution system, or
- (b) other apparatus, equipment or appliances at a site, and is performing a function that could be performed by a generator that is not mobile;

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“specified generator” means—

- (a) a generator, other than an excluded generator, with a rated thermal input—
  - (i) more than or equal to 1 megawatt and less than 50 megawatts, or
  - (ii) in the case of a generator used to meet a capacity agreement or an agreement to provide balancing services, less than 50 megawatts;
- (b) where two or more generators falling with paragraph (a)(i) or (ii) are operated—
  - (i) on the same site,
  - (ii) by the same operator, and
  - (iii) for the same purpose,those generators together, provided that the rated thermal input of those generators together is less than 50 megawatts; or
- (c) where two or more generators, other than excluded generators—
  - (i) are operated as set out in paragraph (b)(i) to (iii), and
  - (ii) together have a rated thermal input more than or equal to 1 megawatt and less than 50 megawatts, even if one or more of the generators has a rated thermal input of less than 1 megawatt,those generators together.

(2) For the purposes of paragraph (1)—

“excluded generator” means—

- (a) generators subject to the provisions of Chapter II or Chapter III of the Industrial Emissions Directive,
- (b) generators operating with a defined nuclear safety role under a nuclear site licence issued by the Office for Nuclear Regulation,
- (c) back-up generators operated for the purpose of testing for no more than 50 hours per year,
- (d) generators installed on an offshore platform situated on, above or below those parts of the sea adjacent to England and Wales from the low water mark to the seaward baseline of the United Kingdom territorial sea,
- (e) generators installed on a gas storage or unloading platform as defined in regulation 2 of the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013;

“mobile”, in relation to a generator, means designed to move or be moved whether on roads or other land.

(3) In sub-paragraph (2), “offshore platform” means any fixed or floating structure which—

- (a) is used for the purposes of or in connection with the production of petroleum, and
- (b) in the case of a floating structure, is maintained on a station during the course of production,

but does not include any structure where the principal purpose of the use of the structure is the establishment of the existence of petroleum or the appraisal of its characteristics, quality or quantity or the extent of any reservoir in which it occurs.

(4) In sub-paragraph (3), “petroleum” includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Interpretation – relevant dates and permitting dates

- 3.—(1) The “relevant date” in relation to a generator means—
- (a) 1st January 2019, in the case of a Tranche B generator;
  - (b) 1st October 2019, in the case of a Tranche A generator with a rated thermal input greater than 5 megawatts which—
    - (i) has an emission of nitrogen oxides of equal to or greater than 500mg/Nm<sup>3</sup>, and
    - (ii) operates for more than 50 hours per year;
  - (c) 1st January 2025, in the case of a Tranche A generator with a rated thermal input greater than 5 megawatts which—
    - (i) has an emission of nitrogen oxides of less than 500mg/Nm<sup>3</sup>, or
    - (ii) operates for less than or equal to 50 hours per year;
  - (d) 1st January 2030, in the case of a Tranche A generator with a rated thermal input equal to or less than 5 megawatts.
- (2) The “permitting date”—
- (a) in relation to a specified generator falling within paragraph 2(1)(a), is the relevant date in relation to that specified generator;
  - (b) in relation to a specified generator falling within paragraph 2(1)(b) or (c), is the earliest of the relevant dates in relation to the generators comprising that specified generator.
- (3) For the purposes of sub-paragraph (1)—
- “Tranche A generator” means a generator—
- (a) with a rated thermal input equal to or greater than 1 megawatt and less than 50 megawatts—
    - (i) which came into operation before 1st December 2016,
    - (ii) which is the subject of a capacity agreement arising from the 2014 or 2015 capacity auctions (whether or not the generator came into operation before 1st December 2016), or
    - (iii) for which a Feed-in Tariff preliminary accreditation application was received by the Gas and Electricity Markets Authority before 1st December 2016;
  - (b) with a rated thermal input of less than 1 megawatt—
    - (i) which is the subject of a capacity agreement arising from the 2014, 2015 or 2016 capacity auctions (whether or not the generator came into operation before 1st December 2016),
    - (ii) for which a Feed-in Tariff preliminary accreditation application was received by the Gas and Electricity Markets Authority before 1st December 2017; or
    - (iii) which is the subject of an agreement to provide balancing services entered into before 31st October 2017,

provided that a generator ceases to be a Tranche A generator if it is the subject of a capacity agreement, or an agreement for provision of balancing services, where that agreement is entered into after 31st October 2017 and remains in force after 31st December 2018;

“Tranche B generator” means any generator which is not a Tranche A generator or an excluded generator (and includes a specified generator which has ceased to be a Tranche A generator).
- (4) For the purposes of sub-paragraph (1), in the case of a generator which is comprised in a specified generator falling within paragraph 2(1)(b) or (c), the generator is deemed to have the total rated thermal input of all the generators comprised in the specified generator.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## Interpretation - general

### 4. In this Schedule—

“back-up generator” means a generator operated for the sole purpose of maintaining power supply at a site during an on-site emergency;

“balancing services” means any services procured by the transmission system operator in order to balance demand and supply, and to ensure the security and quality of electricity supply, across the national transmission system for Great Britain;

“capacity agreement” has the meaning given in regulation 30 of the Electricity Capacity Regulations 2014;

“capacity auction” means an auction under Part 4 of the Electricity Capacity Regulations 2014;

“distribution system” has the meaning given in section 4(4) of the Electricity Act 1989;

“emission limit value” means the maximum permissible quantity of a substance contained in the waste gases from a generator which may be discharged into the air during a given period;

“Feed-in Tariff preliminary accreditation application” means an application for preliminary accreditation made under Part 3 of the Feed-in Tariffs Order 2012;

“nitrogen oxides” means nitric oxide and nitrogen dioxide;

“nuclear site licence” has the meaning given in section 1 of the Nuclear Installations Act 1965;

“transmission system” has the meaning given in section 4(4) of the Electricity Act 1989;

“transmission system operator” means the person operating the national transmission system for Great Britain;

any reference to emissions expressed in  $\text{mg}/\text{Nm}^3$  is to those emissions defined in accordance with the first paragraph of Annex II of the Medium Combustion Plant Directive.

## Environmental permit conditions: general

5.—(1) Subject to paragraph 6, the regulator must exercise its relevant functions in relation to specified generators so as to ensure that they are operated, from the permitting date, in such a way that—

- (a) there is compliance with an emission limit value for nitrogen oxides of  $190\text{mg}/\text{Nm}^3$ ;
- (b) where secondary abatement is required to ensure compliance with the requirement in paragraph (a), the emission limit value for nitrogen oxides is met—
  - (i) in the case of a Tranche A generator or a Tranche B generator which was, but has ceased to be, a Tranche A generator, within 20 minutes of the specified generator commencing operation, or
  - (ii) in the case of any other Tranche B generator, within 10 minutes of the specified generator commencing operation,and in every case emissions must be monitored at least every three years;
- (c) there is no persistent emission of dark smoke, where “dark smoke” has the meaning given in section 3(1) of the Clean Air Act 1993.

(2) Where compliance with air quality aspects of an environmental quality standard requires stricter conditions for the operation of a specified generator, or a generator comprised in a specified generator falling within paragraph 2(1)(b) or (c), from the permitting date the regulator must include additional or stricter measures in the permit to comply with those standards, including (if necessary) a stricter emission limit value than that specified in paragraph (1)(a).

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(3) In the case of a specified generator falling within paragraph 2(1)(b) or (c), the requirements of sub-paragraph (1) must be met by each generator comprising that specified generator only from the relevant date relating to that generator.

### Exceptions to environmental permit conditions

6.—(1) Paragraph 5 does not apply in relation to a specified generator falling within paragraph 2(1)(a), or a generator comprised in a specified generator falling within paragraph 2(1)(b) or (c), that is—

- (a) used at a site which it is not reasonably practicable to connect to the distribution system;
- (b) a back-up generator in respect of which, in the opinion of the regulator, the operator has demonstrated a genuine need to carry out routine testing for more than 50 hours per year.

(2) Paragraph 5 does not apply—

- (a) until 1st January 2025 in relation to a Tranche A generator not falling within sub-paragraph (1)—
  - (i) with a rated thermal input greater than 5 megawatts,
  - (ii) with nitrogen oxide emissions of 500mg/Nm<sup>3</sup> or greater, and
  - (iii) that operates for more than 50 hours per year;
- (b) in relation to a Tranche A generator—
  - (i) with a rated thermal input greater than 5 megawatts,
  - (ii) with nitrogen oxide emissions of 500mg/Nm<sup>3</sup> or greater,
  - (iii) that operates for more than 50 hours per year, and
  - (iv) that is operated only for the purpose of a capacity agreement entered into before 1st December 2016,

for the period in which that capacity agreement remains in force, or until 1st January 2025, whichever is later.

(3) Where a generator falls within sub-paragraph (1) or (2), the regulator must exercise its functions from the relevant date to ensure that the operation of the generator will not give rise to an exceedance of the limit values for nitrogen dioxide specified—

- (a) in the case of a generator operated in England, in Schedule 2 to the Air Quality Standards Regulations 2010, and
- (b) in the case of a generator operated in Wales, in Schedule 1 to the Air Quality Standards (Wales) Regulations 2010.

(4) Paragraph 5 does not apply in relation to a Tranche A generator—

- (a) with a rated thermal input greater than 5 megawatts which—
  - (i) has an emission of nitrogen oxides of less than 500mg/Nm<sup>3</sup>, or
  - (ii) operates for no more than 50 hours per year; or
- (b) with a rated thermal input greater than or equal to 1 megawatt but no greater than 5 megawatts,

where it is operated only for the purpose of a capacity agreement entered into before 1st December 2016, during the period in which that capacity agreement remains in force.

(5) Paragraph 5 does not apply in relation to a Tranche A generator with a rated thermal input of less than 1 megawatt where it is operated only for the purpose of a capacity agreement entered into before 31st January 2017, during the period in which that capacity agreement remains in force.



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(6) For the purposes of sub-paragraphs (2), (4) and (5), a generator comprised in a specified generator falling within paragraph 2(1)(b) or (c) is deemed to have the total rated thermal input of all the generators comprised in that specified generator.]

SCHEDULE 26

Regulation 39(6)

Enforcement undertakings

**Enforcement undertakings**

1.—(1) The Agency may accept an enforcement undertaking from a person in a case where the Agency has reasonable grounds to suspect that the person has committed any of the following offences in relation to a regulated facility or an exempt facility that has been or is being operated in England—

- (a) regulation 38(1) (contravening regulation 12(1) or knowingly causing or knowingly permitting the contravention of regulation 12(1)(a)),
- (b) regulation 38(2) (failing to comply with, or contravening, an environmental permit condition),
- (c) regulation 38(4)(a) (failing to comply with a notice under regulation 61(1) requiring the provision of information),
- (d) regulation 38(5)(a) (failing to comply with the record-keeping requirements in paragraph 17(3) or (4) of Schedule 2), or
- (e) regulation 38(6) (acts of third parties) so far as it relates to an offence listed in paragraphs (a) to (d).

F327(2) .....

(3) For the purposes of this Schedule, an “enforcement undertaking” is a written undertaking to take such action as may be specified in the undertaking within such period as may be so specified.

**Textual Amendments**

F327 Sch. 26 para. 1(2) omitted (30.1.2018) by virtue of [The Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018 \(S.I. 2018/110\)](#), regs. 1, 17

**Contents of an enforcement undertaking**

2.—(1) An enforcement undertaking must specify—

- (a) action to secure that the offence does not continue or recur,
- (b) action to secure that the position is, so far as possible, restored to what it would have been if the offence had not been committed,
- (c) action (including the payment of a sum of money) to benefit any person affected by the offence, or
- (d) where restoration of the harm arising from the offence is not possible, action that will secure equivalent benefit or improvement to the environment.

(2) It must specify the period within which the action must be completed.

(3) It must include—

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- (a) a statement that the undertaking is given in accordance with this Schedule;
  - (b) the terms of the undertaking;
  - (c) how and when a person is considered to have discharged the undertaking.
- (4) The enforcement undertaking may be varied, or the period within which the action must be completed may be extended, if both parties agree in writing.

### **Acceptance of an enforcement undertaking**

3. If the Agency has accepted an enforcement undertaking then, unless the person from whom the undertaking is accepted has failed to comply with the undertaking or any part of it, that person may not at any time be convicted of the offence in respect of the act or omission to which the undertaking relates.

### **General provisions on enforcement undertakings**

- 4.—(1) The Agency must establish and publish the procedure for entering into an enforcement undertaking.
- (2) The Agency must consult such persons as it considers appropriate before doing so.
  - (3) When it accepts an undertaking, the Agency may publish it in whatever manner it sees fit.

### **Discharge of an enforcement undertaking**

- 5.—(1) If the Agency is satisfied that an enforcement undertaking has been complied with, it must issue a certificate to that effect.
- (2) The Agency may require the person who has given the undertaking to provide sufficient information to determine that the undertaking has been complied with.
  - (3) The person who gave the undertaking may at any time apply for such a certificate.
  - (4) The Agency must make a decision as to whether to issue such a certificate, and give written notice of the decision to the applicant, within 14 days of such an application.
  - (5) The person to whom the notice is given may appeal against a decision not to issue a certificate on the grounds that the decision—
    - (a) was based on an error of fact;
    - (b) was wrong in law;
    - (c) was unfair or unreasonable;
    - (d) was wrong for any other reason.

### **Inaccurate, incomplete or misleading information**

- 6.—(1) A person who has given inaccurate, misleading or incomplete information in relation to an enforcement undertaking is regarded as not having complied with it.
- (2) The Agency may by notice in writing revoke a certificate issued under paragraph 5 if it was issued on the basis of inaccurate, incomplete or misleading information.

### **Non-compliance with an enforcement undertaking**

- 7.—(1) If an enforcement undertaking is not complied with, the Agency may bring criminal proceedings for the offence in respect of the act or omission to which the undertaking relates.
- (2) If a person has complied partly but not fully with an undertaking, that part-compliance must be taken into account in the imposition of any criminal sanction on the person.

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(3) Criminal proceedings for offences triable summarily to which an enforcement undertaking relates may be instituted at any time up to 6 months from the date when the Agency notifies the person that such person has failed to comply with that undertaking.

### Appeals

- 8.—(1) An appeal against a decision of the Agency under paragraph 5 is to the First-tier Tribunal.
- (2) The Tribunal may—
- (a) affirm the decision;
  - (b) quash the decision and remit it to the Agency.

### Guidance as to use of enforcement undertakings

- 9.—(1) The Agency must publish guidance about its use of enforcement undertakings.
- (2) The Agency must revise the guidance where appropriate.
- (3) The Agency must consult such persons as it considers appropriate before publishing any guidance or revised guidance.
- (4) The Agency must have regard to the guidance or revised guidance in exercising its functions.

### Publication of enforcement undertakings

- 10.—(1) The Agency must from time to time publish the cases in which an enforcement undertaking has been entered into.
- (2) This paragraph does not apply in cases where the Agency considers that publication would be inappropriate.

[<sup>F328</sup>SCHEDULE 26A

Regulation 39(7)

### Variable monetary penalties (England)

#### Textual Amendments

**F328** Sch. 26A inserted (E.) (1.12.2023) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(England\) \(No. 2\) Regulations 2023 \(S.I. 2023/1046\)](#), reg. 1(1), [Sch.](#)

## PART 1

### Variable monetary penalties: procedure

#### Power to impose a variable monetary penalty

- 1.—(1) The Agency may by notice impose on a person a requirement to pay to the Agency a monetary penalty of such amount as the Agency may determine (“a variable monetary penalty”) in relation to a relevant offence which is committed in England on or after 1st December 2023.
- (2) The Agency may only impose a variable monetary penalty where it is satisfied beyond reasonable doubt that the person has committed the offence.

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- (3) In this Schedule, “a relevant offence” means an offence specified in regulation 38.
- (4) A variable monetary penalty must not be imposed on a person in relation to a relevant offence where—
- (a) a variable monetary penalty has already been imposed on that person in relation to the same act or omission which gave rise to the offence; or
  - (b) the Agency has accepted an enforcement undertaking under paragraph 1 of Schedule 26 in relation to the same act or omission, unless the person from whom the undertaking is accepted has failed to comply with the undertaking, or any part of it.
- (5) Before serving a notice relating to a variable monetary penalty, the Agency may require a person to provide such information as is reasonable to establish the amount of any financial benefit arising as a result of the offence.
- (6) The Agency may impose a variable monetary penalty of—
- (a) any amount, in relation to an offence under regulation 38(1) to (4); or
  - (b) an amount not exceeding the maximum amount of the fine which may be imposed on summary conviction, in relation to an offence committed by an establishment or undertaking under regulation 38(5).

#### **Notice of intent to impose a variable monetary penalty**

- 2.—(1) Where the Agency proposes to impose a variable monetary penalty on a person, it must first serve on that person a notice of what is proposed (a “notice of intent”).
- (2) The notice of intent must include information as to—
- (a) the grounds for imposing the variable monetary penalty;
  - (b) the amount of the variable monetary penalty proposed;
  - (c) the right to make representations and objections;
  - (d) the circumstances in which the Agency may not impose the variable monetary penalty; and
  - (e) the right to make representations and objections within 28 days beginning with the day on which the notice of intent was received.

#### **Making representations and objections**

- 3.—(1) A person on whom a notice of intent is served may, within 28 days beginning with the day on which the notice was received, make written representations and objections to the Agency in relation to the imposition of the variable monetary penalty.
- (2) If the notice of intent is served other than by post, the date that the person receives the notice is to be taken as—
- (a) the date that the email containing the notice was sent to the person, if served by email; or
  - (b) the date that the notice is delivered to the person, if served by another method.

#### **Offering a third party undertaking**

- 4.—(1) A person on whom a notice of intent is served may offer the Agency an undertaking as to action to be taken by that person (including the payment of a sum of money) to benefit any third party affected by the offence (a “third party undertaking”).
- (2) The Agency may accept or reject such a third party undertaking.
- (3) If the Agency accepts the third party undertaking, it must also take that undertaking into account in making a decision in relation to the imposition of a variable monetary penalty.

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### **Procedure for imposition of a variable monetary penalty**

5.—(1) Subject to sub-paragraph (2), after the end of the period for making representations and objections, the Agency must decide whether to impose the variable monetary penalty, with or without modifications.

(2) The Agency may not impose a variable monetary penalty on a person where it is satisfied that the person would not, by reason of any defence, be liable to be convicted of the offence to which the notice relates.

(3) Where the Agency decides to impose a variable monetary penalty, it must send to the person a notice imposing the variable monetary penalty (a “final notice”) including the information specified in paragraph 6.

### **Final notice**

6. A final notice must specify—

- (a) the grounds for imposing the variable monetary penalty;
- (b) the amount of the penalty;
- (c) the method by which it can be paid;
- (d) the period within which payment must be made;
- (e) the grounds on which the person on whom the penalty is imposed may appeal; and
- (f) the consequences of failing to comply with the requirements of the final notice.

### **Variable monetary penalties: criminal proceedings and conviction**

7.—(1) This paragraph applies where the Agency has, in relation to a relevant offence—

- (a) imposed a variable monetary penalty on a person; or
- (b) accepted a third party undertaking from a person.

(2) The person referred to in sub-paragraph (1)(a) or (b) may not at any time be convicted of an offence in relation to the same act or omission for which the variable monetary penalty was imposed or the third party undertaking accepted, except in the case referred to in sub-paragraph (3).

(3) A case is within this sub-paragraph if—

- (a) no variable monetary penalty is imposed on the person;
- (b) a third party undertaking is accepted from the person; and
- (c) the person fails to comply with the third party undertaking.

(4) Where sub-paragraph (3) applies, summary proceedings in relation to the offence which gave rise to the third party undertaking may be instituted at any time within the period of six months beginning with the date on which the Agency notified the person of their failure to comply with the third party undertaking.

### **Variable monetary penalties: enforcement cost recovery notice**

8.—(1) The Agency may require a person served with a final notice in accordance with paragraph 5(3) to pay the costs incurred by the Agency in relation to the variable monetary penalty.

(2) The costs which may be recovered are those incurred by the Agency up to the time that a final notice was served on the person and may include in particular—

- (a) investigation costs;
- (b) administration costs; and

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- (c) costs of obtaining expert advice (including legal advice).
- (3) The Agency may recover the costs referred to in paragraph (2) by serving a notice requiring payment (“an enforcement cost recovery notice”) on the person.
- (4) An enforcement cost recovery notice must—
  - (a) specify the amount to be paid and the method by which it may be paid;
  - (b) specify the period within which payment must be made, which must not be less than 28 days;
  - (c) include statements—
    - (i) that the Agency may on request be required to provide a detailed breakdown of the costs specified; and
    - (ii) that the person is not liable to pay any costs that they can show to have been unnecessarily incurred;
  - (d) specify the grounds on which the person served with the notice may appeal; and
  - (e) specify the consequences of failure to pay the amount required within the specified period.
- (5) The person on whom the notice is served may require the Agency to provide a detailed breakdown of the amount of the costs.
- (6) The person is not liable to pay any costs which they can show to have been unnecessarily incurred.
- (7) The Agency may at any time, in writing, withdraw an enforcement cost recovery notice or reduce the amount specified in the notice.

## PART 2

### Non-compliance penalties and recovery of penalties and costs

#### Non-compliance penalty

- 9.—**(1) If a person fails to comply with a third party undertaking accepted by the Agency in accordance with paragraph 4(2), the Agency may serve a notice on that person imposing a monetary penalty (“a non-compliance penalty”) in relation to the offence to which the third party undertaking relates.
- (2) The amount of the non-compliance penalty must be determined by the Agency in accordance with sub-paragraph (3).
- (3) The amount of the non-compliance penalty must be a percentage of the costs of fulfilling the requirements or the remaining requirements of the third party undertaking, up to a maximum of 100%.
- (4) The notice referred to in paragraph (1) must include information as to—
- (a) the grounds for imposing the non-compliance penalty;
  - (b) the amount of the penalty;
  - (c) the method by which it can be paid;
  - (d) the period within which payment must be made, which must not be less than 28 days; and
  - (e) the grounds on which the person served with the notice may appeal.
- (5) The Agency may at any time withdraw a notice imposing a non-compliance penalty by sending written confirmation of the withdrawal to the person on whom the notice was served.

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### **Power to recover a variable monetary penalty or non-compliance penalty**

10.—(1) After the end of the period for payment of—

- (a) a variable monetary penalty;
- (b) a non-compliance penalty; or
- (c) costs specified in an enforcement cost recovery notice,

the Agency may recover from the person on whom the penalty was imposed, or the notice served, the amount of the penalty or costs.

(2) The amount of the penalty or costs may be recovered as a civil debt, or, on the order of the court, as if payable under a court order.

## **PART 3**

### **Appeals**

#### **Variable monetary penalties: appeals**

11.—(1) A person may appeal to the First-tier Tribunal against a decision by the Agency to impose a variable monetary penalty by service of a final notice.

(2) An appeal under this paragraph may be made on the grounds that—

- (a) the decision was based on an error of fact;
- (b) the decision was wrong in law;
- (c) the amount of the penalty was unreasonable;
- (d) the decision was unreasonable for any other reason.

(3) Where a person appeals under this paragraph, the effect of the final notice to which the appeal relates is suspended until the appeal is finally determined.

#### **Non-compliance penalty and enforcement cost recovery notice: appeals**

12.—(1) A person may appeal to the First-tier Tribunal against a decision by the Agency to impose a non-compliance penalty or to serve an enforcement cost recovery notice.

(2) An appeal under sub-paragraph (1) may be made on the grounds that—

- (a) the decision to impose the penalty or serve the notice was based on an error of fact;
- (b) the decision was wrong in law;
- (c) the amount of the penalty or costs is unreasonable;
- (d) the decision was unreasonable for any other reason.

(3) Where a person appeals under sub-paragraph (1), the effect of the decision or notice to which the appeal relates is suspended until the appeal is finally determined.

#### **Powers of the First-tier Tribunal on appeal**

13. On an appeal against a decision by the Agency to impose a variable monetary penalty or non-compliance penalty or to serve an enforcement cost recovery notice, the First-tier Tribunal may—

- (a) withdraw the penalty or notice;
- (b) confirm the Agency's decision to impose the penalty or serve the notice;

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- (c) vary the amount of the penalty or the amount specified in the enforcement cost recovery notice;
- (d) take any of the steps that the Agency could take in relation to the act or omission which gave rise to the penalty or notice; or
- (e) remit the decision to impose the penalty or serve the notice, or any matter relating the decision, to the Agency for reconsideration.

## PART 4

### Guidance

#### Guidance as to the use of civil sanctions and cost recovery

- 14.—(1) The Agency must—
- (a) publish guidance about its use of variable monetary penalties, non-compliance penalties and enforcement cost recovery notices; and
  - (b) revise the guidance where appropriate.
- (2) Before publishing guidance or revised guidance, the Agency must consult—
- (a) such bodies or persons as appear to the Agency to be representative of the interests of local government, industry, agriculture and small businesses; and
  - (b) such organisations as appear to the Agency to be substantially affected by the proposals.
- (3) In the case of a variable monetary penalty, the guidance must include information as to—
- (a) the circumstances in which a variable monetary penalty is likely to be imposed;
  - (b) the circumstances in which it may not be imposed; and
  - (c) the rights to make representations and objections and to appeal.
- (4) In the case of a non-compliance penalty or an enforcement cost recovery notice, the guidance must include information as to—
- (a) how the Agency will exercise the power to impose a non-compliance penalty and the power to recover costs;
  - (b) how it will determine the amount to be recovered; and
  - (c) the rights to make representations and objections and to appeal.
- (5) The Agency must have regard in exercising its functions to the guidance or revised guidance published in accordance with this paragraph.

## PART 5

### Publication of reports

#### Publication of enforcement action

- 16.—(1) The Agency must from time to time publish reports specifying —
- (a) the cases in which a variable monetary penalty has been imposed on a person; and
  - (b) the cases in which a third party undertaking has been accepted from a person.



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(2) In sub-paragraph (1)(a), the reference to cases in which a variable monetary penalty has been imposed does not include cases where a variable monetary penalty has been imposed but was overturned on appeal.

(3) This paragraph does not apply in cases where the Agency considers that publication would be inappropriate.]

## SCHEDULE 27

Regulation 46(1)

### Public registers

#### **Matters to be included in a public register**

- 1.—(1) A public register must contain a copy of—
  - (a) every application for—
    - (i) the grant of an environmental permit,
    - (ii) the variation of an environmental permit,
    - (iii) the transfer of an environmental permit in whole or in part, or
    - (iv) the surrender of an environmental permit in whole or in part;
  - (b) every notice requesting further information under paragraph 4(1) of Part 1 of Schedule 5;
  - (c) all representations made in respect of an application for the grant or variation of an environmental permit;
  - (d) every environmental permit, variation, transfer in whole or in part, or surrender in whole or in part granted or made by the regulator;
  - (e) every determination or decision notified under paragraph 17(2)(a) of Part 1 of Schedule 5;
  - (f) every prohibition notice, enforcement notice, revocation notice, suspension notice, landfill closure notice, mining waste facility closure notice or notice withdrawing such a notice served by the regulator;
  - (g) in relation to an appeal to an appropriate authority, every—
    - (i) notice of appeal,
    - (ii) document relating to the appeal,
    - (iii) representation made in respect of the appeal, and
    - (iv) determination of the authority, including any report accompanying that determination;
  - (h) all information obtained by the regulator—
    - (i) as a result of its own monitoring,
    - (ii) as a result of monitoring required under an environmental permit condition, or
    - (iii) under regulation 61 in relation to monitoring;
  - (i) all other information given to the regulator in compliance with—
    - (i) an environmental permit condition,
    - (ii) an enforcement notice,
    - (iii) a suspension notice,
    - (iv) a landfill closure notice,

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- (v) a mining waste facility closure notice, or
  - (vi) regulation 61;
  - (j) every report published by the regulator relating to an assessment of the environmental consequences of the operation of an installation;
  - (k) every direction given to the regulator, the exemption registration authority or the exemption authority by an appropriate authority under these Regulations, other than a direction given under regulation 47 or paragraph 13 of Schedule 2.
- (2) A public register must also contain—
- (a) details of any conviction for, or enforcement undertaking accepted in relation to, an offence under regulation 38 in respect of an environmental permit granted by the regulator or a failure to apply to the regulator for the grant of an environmental permit,
  - (b) in the case of a body corporate, details of any formal caution for an offence under regulation 38 in respect of an environmental permit granted by the regulator or a failure to apply to the regulator for the grant of an environmental permit,
  - (c) an inventory of closed mining waste facilities as required under Article 20 of the Mining Waste Directive,
  - (d) a list identifying all waste incineration plants and waste co-incineration plants—
    - (i) which have a capacity of less than 2 tonnes per hour, and
    - (ii) whose operation is authorised by an environmental permit containing conditions which give effect to Chapter IV of the Industrial Emissions Directive,
  - (e) the information provided to the regulator by the operator of a materials facility under paragraph 7 of Part 2 of Schedule 9, and
  - (f) details of—
    - (i) all fees and charges paid to a regulator within the meaning of regulation 66 pursuant to a scheme under that regulation, and
    - (ii) the total expenditure of that regulator in exercising its functions under these Regulations.
- (3) The regulator may omit any representation referred to in sub-paragraph (1) from its public register at the request of the person making the representation, but the regulator must then include in the public register a statement that a representation was made and was the subject of such a request.
- (4) The regulator may omit from its public register any representation which substantially duplicates a representation already included in the public register, but the regulator must then include on the register a statement of the number of representations that have been omitted on this basis.
- (5) If the regulator omits from its public register information referred to in sub-paragraph (1) (h) on the grounds that it is commercially or industrially confidential, the regulator must include in the public register a statement indicating whether or not there has been compliance with any environmental permit condition related to that information and requiring compliance with emission limit values.

### **Information no longer relevant for public participation**

2. A regulator is not required to keep in its public register information which is no longer relevant for the purposes of public participation required under these Regulations.

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### Formal cautions

3. A regulator must remove details of any formal caution from its public register 5 years after the caution was given.

### Spent convictions of individuals

4. A regulator must remove details of any conviction from its public register once the rehabilitation period for a sentence has ended in accordance with section 5 of the Rehabilitation of Offenders Act 1974 <sup>M155</sup>.

#### Marginal Citations

**M155** 1974 c. 53; section 5 was amended by paragraph 24 of Schedule 7 to the [Criminal Justice \(Scotland\) Act 1980 \(c. 62\)](#), [paragraph 36](#) of Schedule 14, and Schedule 16, to the [Criminal Justice Act 1982 \(c. 48\)](#), [paragraph 9](#) of Schedule 8 to the [Criminal Justice Act 1988 \(c. 33\)](#), [paragraph 48](#) of Schedule 9 to the [Powers of Criminal Courts \(Sentencing\) Act 2000 \(c. 6\)](#), [paragraph 18](#) of Schedule 32(1) to the [Criminal Justice Act 2003 \(c. 44\)](#), [paragraph 65](#) of Schedule 16 and Schedule 17 to the [Armed Forces Act 2006 \(c. 52\)](#), and section 139 of, and paragraph 2 of Schedule 21(1) to, the [Legal Aid, Sentencing and Punishment of Offenders Act 2012 \(c. 10\)](#).

## SCHEDULE 28

Regulation 73

### Revocations

<b>(1)</b> <b>Regulations revoked</b>	<b>(2)</b> <b>References</b>	<b>(3)</b> <b>Extent of revocation</b>
The 2007 Regulations	S.I. 2007/3538	The whole Regulations, except—  regulations 1, 67, 72(3), (4), (8), (9) and (11) and 73 and Schedule 21, and  for the purpose of any of those provisions, any definition in Part 1.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2009 <small>M156</small>	S.I. 2009/1799	The whole Regulations, except regulations 1 and 28(1) and Schedule 2.
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2009 <small>M157</small>	S.I. 2009/3381	The whole Regulations, except regulations 1 and 13(1) and (3).
The 2010 Regulations	S.I. 2010/675	The whole Regulations, except—  regulations 1, 67, 107 and Schedule 26, and

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		for the purpose of any of those provisions, any definition in Part 1.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2010	S.I. 2010/676	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2010	S.I. 2010/2172	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2011 M158	S.I. 2011/2043	The whole Regulations, except regulations 1 to 5, 9 and 16 and Schedule 2.
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2011	S.I. 2011/2933	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2012	S.I. 2012/630	The whole Regulations, except regulations 1 to 3, 19(1) and (2), 20 and 21.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2013	S.I. 2013/390	The whole Regulations, except regulations 1 to 9 and 57.
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2013 M159	S.I. 2013/766	Regulation 2(3).
The Environmental Permitting (England and Wales) (Amendment) Regulations 2014	S.I. 2014/255	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2014	S.I. 2014/2852	The whole Regulations, except regulations 1 to 4.
The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2015	S.I. 2015/324	The whole Regulations, except for regulations 1 and 2(1) and (2).
The Environmental Permitting (England and Wales) (Amendment) Regulations 2015	S.I. 2015/918	The whole Regulations, except for regulations 1 and 2.
The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2015	S.I. 2015/934	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) (No. 3) Regulations 2015	S.I. 2015/1756	The whole Regulations.

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The Environmental Permitting (England and Wales) (Amendment) Regulations 2016	S.I. 2016/149 (England)	The whole Regulations.
The Environmental Permitting (England and Wales) (Amendment) Regulations 2016	S.I. 2016/475 (No. 2)	The whole Regulations, except for regulations 1 to 7, 29 and 31 to 34 and Schedule 3.

#### Marginal Citations

- M156 Amended by [S.I. 2010/675](#).
- M157 Amended by [S.I. 2010/675](#).
- M158 Amended by [S.I. 2016/58](#) (W. 28).
- M159 Amended by [S.I. 2015/483](#).

## SCHEDULE 29

Regulation 75

### Consequential amendments

## PART 1

### Public General Acts

#### Continental Shelf Act 1964

1. In section 7 of the Continental Shelf Act 1964<sup>M160</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

- M160 1964 c. 29; section 7 was amended by paragraph 2(3) of Schedule 4 to the [Petroleum Act 1998](#) (c. 17) and by [S.I. 2010/675](#) and 2011/2043.

#### Nuclear Installations Act 1965

2.—(1) The Nuclear Installations Act 1965<sup>M161</sup> is amended as follows.

(2) In section 3(14)(a)<sup>M162</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(3) In section 4<sup>M163</sup>—

- (a) in subsection (3)(d), for “the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”;

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (b) in subsection (7)(a), for “the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M161** 1965 c. 57.

**M162** Section 3 was substituted by paragraph 18 of Schedule 12 to the [Energy Act 2013 \(c. 32\)](#).

**M163** Section 4 was substituted by paragraph 19 of Schedule 12 to the Energy Act 2013.

### Control of Pollution Act 1974

3. In section 30(5) of the Control of Pollution Act 1974 <sup>M164</sup>—
- (a) in the words before paragraph (a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”;
- (b) in paragraph (b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M164** 1974 c. 40; section 30(5) was amended by [S.I. 2010/675](#) and 2011/2043. Section 30 is prospectively repealed by Part 2 of Schedule 16 to the 1990 Act on a date to be appointed.

### Salmon and Freshwater Fisheries Act 1975

4. In section 5(5)(c) of the Salmon and Freshwater Fisheries Act 1975 <sup>M165</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M165** 1975 c. 51; section 5(5)(c) was substituted by [S.I. 2010/675](#).

### Highways Act 1980

5. In section 339(1A) of the 1980 Act <sup>M166</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M166** Section 339(1A) was inserted by [S.I. 2016/475](#).

### Environmental Protection Act 1990

- 6.—(1) The 1990 Act is amended as follows.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(2) In section 28(2) <sup>M167</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(3) In section 29(12) <sup>M168</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(4) For section 33(1B) <sup>M169</sup>, substitute—

“(1B) Subsection (1) does not apply in relation to any part of a waste operation that—

- (a) is the subject of a marine licence under the Marine and Coastal Access Act 2009 <sup>M170</sup>, or
- (b) does not require such a licence by virtue of any provision made by or under section 74, 75 <sup>M171</sup> or 77 of that Act and does not involve the dismantling of a ship that is waste.”.

(5) In section 78YB(5) <sup>M172</sup>, in the definition of “enforcement action”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(6) In section 78YC(b) <sup>M173</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(7) In section 142(7) <sup>M174</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M167** Section 28(2) was amended by [S.I. 2010/675](#). Section 28 is prospectively repealed by Schedule 3 to the [Pollution Prevention and Control Act 1999 \(c. 24\)](#) on a date to be appointed.

**M168** Section 29(12) was inserted by [S.I. 2007/3538](#) and substituted by [S.I. 2010/675](#).

**M169** Section 33(1B) was inserted by [S.I. 2007/3538](#) and substituted by [S.I. 2010/675](#).

**M170** [2009 c. 23](#).

**M171** Section 75 was amended by [S.I. 2011/405](#) and [2016/738](#).

**M172** Section 78YB was inserted by section 57 of the 1995 Act; subsection (5) was inserted by [S.I. 2007/3538](#) and amended by [S.I. 2010/675](#).

**M173** Section 78YC was inserted by section 57 of the 1995 Act and amended by [S.I. 2010/675](#).

**M174** Section 142(7) was amended by [S.I. 2006/2407](#), [2010/675](#), [2012/1916](#) and [2014/1638](#).

#### Atomic Weapons Establishment Act 1991

7. In the Atomic Weapons Establishment Act 1991 <sup>M175</sup>—

- (a) in the heading before paragraph 10C of the Schedule <sup>M176</sup>, for “Environmental Permitting (England and Wales) Regulations 2010” substitute “ Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph 10C(1) of the Schedule, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

#### Marginal Citations

**M175** 1991 c. 46.

**M176** Paragraph 10C was inserted by [S.I. 2010/675](#).

### Water Industry Act 1991

**8.**—(1) The Water Industry Act 1991 <sup>M177</sup> is amended as follows.

(2) In section 117(5)(a) <sup>M178</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(3) In section 138(1B)(a) <sup>M179</sup>, in the words after sub-paragraph (ii), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M177** 1991 c. 56.

**M178** Section 117(5)(a) was amended by paragraph 97 of Schedule 7 to the [Water Act 2014 \(c. 21\)](#).

**M179** Section 138(1B) was inserted by [S.I. 2000/1973](#) and paragraph (a) was amended by [S.I. 2010/675](#).

### Water Resources Act 1991

**9.** In section 221(1) of the 1991 Act <sup>M180</sup>, in the definition of “Environmental Permitting Regulations”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M180** The definition was inserted by [S.I. 2010/675](#).

### Water Consolidation (Consequential Provisions) Act 1991

**10.** In paragraph 30(1)(a) of Schedule 1 to the Water Consolidation (Consequential Provisions) Act 1991 <sup>M181</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M181** 1991 c. 60; paragraph 30(1) was amended by [S.I. 2010/675](#).

### Clean Air Act 1993

**11.** In section 41A of the Clean Air Act 1993 <sup>M182</sup>—

(a) in subsection (2)(c), for “paragraph 7 of Schedule 2” substitute “ paragraph 11 of Schedule 2 ”;



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- (b) in subsection (4), in the definition of “the Environmental Permitting Regulations”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

**Marginal Citations**

**M182** 1993 c. 11; section 41A was inserted by [S.I. 2000/1973](#); subsection 2(c) was inserted by [S.I. 2007/3538](#) and amended by [S.I. 2010/675](#); subsection (4) was inserted by [S.I. 2007/3538](#) and amended by [S.I. 2009/1799](#) and 2010/675.

**Goods Vehicles (Licensing of Operators) Act 1995**

**12.** In paragraph 5(ia) of Schedule 2 to the Goods Vehicles (Licensing of Operators) Act 1995 <sup>M183</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

**Marginal Citations**

**M183** 1995 c. 23; paragraph 5(1a) was inserted by [S.I. 2007/3538](#) and amended by [S.I. 2010/675](#).

**Environment Act 1995**

**13.—(1)** The 1995 Act is amended as follows.

(2) In section 42(3)(b) <sup>M184</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(3) In section 56(1) <sup>M185</sup>, in paragraph (j) of the definition of “environmental licence” in the application of Part 1 of the 1995 Act in relation to an appropriate agency, for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(4) In paragraph 4(3)(d) of Schedule 20 <sup>M186</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

**Marginal Citations**

**M184** Section 42(3)(b) was substituted by [S.I. 2010/675](#).

**M185** Paragraph (j) of the definition of “environmental licence” was substituted by [S.I. 2009/3381](#).

**M186** Paragraph 4(3)(d) of Schedule 20 was inserted by [S.I. 2000/1973](#) and substituted by [S.I. 2010/675](#).

**Petroleum Act 1998**

**14.** In section 4B(8) of the Petroleum Act 1998 <sup>M187</sup>, in the definition of “environmental permit”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

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#### Marginal Citations

**M187** 1998 c. 17; section 4B was inserted by section 50 of the [Infrastructure Act 2015 \(c. 7\)](#).

### Finance Act 2000

**15.** In paragraph 51(6) of Schedule 6 to the Finance Act 2000 <sup>M188</sup>, in the definition of “primary activity”, in the table—

- (a) in the heading before entry 1, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in entry 5(1), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”;
- (c) in entry 5(2)(a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M188** 2000 c. 17; relevant amendments to paragraph 51(6) were made by [S.I. 2001/1139](#), 2007/3538 and 2010/675.

### Energy Act 2004

**16.—**(1) The Energy Act 2004 <sup>M189</sup> is amended as follows.

(2) In section 10(2)(b) <sup>M190</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

(3) In section 37(7) <sup>M191</sup>, in the definition of “radioactive waste”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M189** 2004 c. 20.

**M190** Section 10 was amended by [S.I. 2010/675](#).

**M191** The definition was amended by [S.I. 2010/675](#).

### Planning Act 2008

**17.** In section 30A(7) of the Planning Act 2008 <sup>M192</sup>, in the definition of “radioactive waste”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

#### Marginal Citations

**M192** 2008 c. 29; section 30A was inserted by [S.I. 2015/949](#).

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## Energy Act 2008

**18.** In section 59(2)(d) of the Energy Act 2008 <sup>M193</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

### Marginal Citations

**M193** 2008 c. 32; section 59(2)(d) was amended by [S.I. 2010/675](#).

## Scrap Metal Dealers Act 2013

**19.** In section 22(7)(a) of the Scrap Metal Dealers Act 2013 <sup>M194</sup>, for “the Environmental (Permitting) Regulations 2010 (S.I. 2010/675)” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

### Marginal Citations

**M194** 2013 c. 10.

## Defence Reform Act 2014

**20.** In the Defence Reform Act 2014 <sup>M195</sup>—

- (a) in the heading before paragraph 6 of Schedule 1, for “Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675)” substitute “ Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph 6 of Schedule 1, for “The Environmental Permitting (England and Wales) Regulations 2010” substitute “ The Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ”.

### Marginal Citations

**M195** 2014 c. 20. Schedule 1 comes into force on a day to be appointed.

## PART 2

### Subordinate legislation

## Deposits in the Sea (Exemptions) Order 1985

**1.** In article 4(2) of the Deposits in the Sea (Exemptions) Order 1985 <sup>M196</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

### Marginal Citations

**M196** [S.I. 1985/1699](#); relevant amending instruments are [S.I. 1994/1056](#), 2007/3538 and 2010/675.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Town and Country Planning (Use Classes) Order 1987

2. In article 3(8) of the Town and Country Planning (Use Classes) Order 1987 <sup>M197</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M197** [S.I. 1987/764](#); relevant amending instruments are [S.I. 2002/1875](#) (W. 184) and 2010/675.

### Civil Jurisdiction (Offshore Activities) Order 1987

3. In the Civil Jurisdiction (Offshore Activities) Order 1987 <sup>M198</sup>—
- (a) in the heading of article 4, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in article 4, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M198** [S.I. 1987/2197](#), amended by [S.I. 2010/675](#) and 2011/2043.

### Urban Waste Water Treatment (England and Wales) Regulations 1994

4. In regulation 2 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 <sup>M199</sup>, in the definition of “Environmental Permitting Regulations”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M199** [S.I. 1994/2841](#), amended by [S.I. 2010/675](#); there are other amending instruments but none is relevant.

### Landfill Tax Regulations 1996

5. In regulation 33(4)(h) of the Landfill Tax Regulations 1996 <sup>M200</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M200** [S.I. 1996/1527](#); relevant amending instruments are [S.I. 2007/3538](#) and 2010/675.

### Water Protection Zone (River Dee Catchment) Designation Order 1999

6. In article 2 of the Water Protection Zone (River Dee Catchment) Designation Order 1999 <sup>M201</sup>—

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (a) in the definition of “catchment control site”, for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph (ii) of the definition of “controlled substance”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M201 S.I. 1999/915; relevant amending instruments are S.I. 2007/3538 and 2010/675.

**Ionising Radiations Regulations 1999**

7. In regulation 30(2)(a) of the Ionising Radiations Regulations 1999<sup>M202</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M202 S.I. 1999/3232, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

**Weighing Equipment (Automatic Gravimetric Filling Instruments) Regulations 2000**

8. In Schedule 3 to the Weighing Equipment (Automatic Gravimetric Filling Instruments) Regulations 2000<sup>M203</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M203 S.I. 2000/388, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

**Non-automatic Weighing Instruments Regulations 2000**

9. In regulation 28(7) of the Non-automatic Weighing Instruments Regulations 2000<sup>M204</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M204 S.I. 2000/3236, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

**Control of Pollution (Oil Storage) (England) Regulations 2001**

10. In regulation 2(2)(a) of the Control of Pollution (Oil Storage) (England) Regulations 2001<sup>M205</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

M205 [S.I. 2001/2954](#); relevant amending instruments are [S.I. 2007/3538](#) and 2010/675.

**Weighing Equipment (Automatic Rail-weighbridges) Regulations 2003**

11. In Schedule 3 to the Weighing Equipment (Automatic Rail-weighbridges) Regulations 2003 <sup>M206</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M206 [S.I. 2003/2454](#), amended by [S.I. 2010/675](#).

**End-of-Life Vehicles Regulations 2003**

12. In regulation 2 of the End-of-Life Vehicles Regulations 2003 <sup>M207</sup>, in the definition of “authorised treatment facility”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M207 [S.I. 2003/2635](#); relevant amending instruments are [S.I. 2007/3538](#) and 2010/675.

**Weighing Equipment (Automatic Catchweighing Instruments) Regulations 2003**

13. In Schedule 3 to the Weighing Equipment (Automatic Catchweighing Instruments) Regulations 2003 <sup>M208</sup>, under “Definition of waste”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M208 [S.I. 2003/2761](#), amended by [S.I. 2010/675](#); there are other amending instruments but none is relevant.

**Water Environment (Water Framework Directive) (England and Wales) Regulations 2003**

14. For paragraph 17 of Schedule 2 to the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 <sup>M209</sup>, substitute—

“17. The Environmental Permitting (England and Wales) Regulations 2016.”.

**Marginal Citations**

M209 [S.I. 2003/3242](#), amended by [S.I. 2015/1623](#); there are other amending instruments but none is relevant.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004

15. For paragraph 14 of Schedule 2 to the Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004 <sup>M210</sup> substitute—

“14. The Environmental Permitting (England and Wales) Regulations 2016.”.

### Marginal Citations

M210 S.I. 2004/99, amended by S.I. 2016/139.

## Hazardous Waste (England and Wales) Regulations 2005

16. In regulation 5(1) of the Hazardous Waste (England and Wales) Regulations 2005 <sup>M211</sup>, in the definition of “the Environmental Permitting Regulations”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

### Marginal Citations

M211 S.I. 2005/894, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

## Hazardous Waste (Wales) Regulations 2005

17.—(1) The Hazardous Waste (Wales) Regulations 2005 <sup>M212</sup> are amended as follows.

(2) In regulation 5(1)—

(a) in the English language text, for the definition of “the Environmental Permitting Regulations” substitute—

““the Environmental Permitting Regulations” (“*y Rheoliadau Trwyddedu Amgylcheddol*”) means the Environmental Permitting (England and Wales) Regulations 2016;”;

(b) in the Welsh language text—

(i) in the appropriate place insert the following definitions—

“mae i “*esemptiad sylweddau ymbelydrol*” (“*radioactive substances exemption*”) yr ystyr a roddir i “radioactive substances exemption” yn rheoliad 2(1) o'r Rheoliadau Trwyddedu Amgylcheddol;”;

“mae i “*gweithgaredd sylweddau ymbelydrol*” (“*radioactive substances activity*”) yr ystyr a roddir i “radioactive substances activity” yn Atodlen 23 i'r Rheoliadau Trwyddedu Amgylcheddol;”;

“mae i “*gwastraff ymbelydrol*” (“*radioactive waste*”) yr ystyr a roddir i “radioactive waste” yn Atodlen 23 i'r Rheoliadau Trwyddedu Amgylcheddol;”;

“ystyr “*y Rheoliadau Trwyddedu Amgylcheddol*” (“the Environmental Permitting Regulations”) yw Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016;”;

“mae i “*trwydded amgylcheddol*” (“*environmental permit*”) yr ystyr a roddir i “environmental permit” yn y Rheoliadau Trwyddedu Amgylcheddol;”;

(ii) for the definition of “*esemptiad cofrestredig*” (“registered exemption”) substitute—

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“ystyr “esemptiad cofrestredig” (“registered exemption”) yw gwaith gwastraff esempt o fewn ystyr y Rheoliadau Trwyddedu Amgylcheddol;”.

(3) In regulation 15, in the Welsh language text, for paragraph (1) substitute—

“(1) Mae'r rheoliad hwn yn gymwys i wastraff ymbelydrol—

(a) pan nad yw gweithgaredd sylweddau ymbelydrol mewn cysylltiad â'r gwastraff ymbelydrol hynny yn gofynni trwydded amgylcheddol yn rhinwedd esemptiad sylweddau ymbelydrol; a

(b) pan fod gan y gwastraff ymbelydrol un neu fwy o nodweddion peryglus yn codi heb fod o'i natur ymbelydrol.”.

(4) In regulation 22(2), in the Welsh language text, for “thrwydded rheoli gwastraff” substitute “thrwydded amgylcheddol”.

(5) In regulation 26(4), in the Welsh language text, in sub-paragraph (ch), for “baragraff 13 o Atodlen 4 i Reoliadau 1994” substitute “reoliad 34(2) o'r Rheoliadau Trwyddedu Amgylcheddol”.

#### Marginal Citations

**M212** [S.I. 2005/1806](#) (W. 138); relevant amending instruments are [S.I. 2007/3538](#), 2010/675 and 2011/2043; there are other amending instruments but none is relevant.

### Measuring Instruments (Automatic Rail-weighbridges) Regulations 2006

**18.** In regulation 16(3) of the Measuring Instruments (Automatic Rail-weighbridges) Regulations 2006 <sup>M213</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.

#### Marginal Citations

**M213** [S.I. 2006/1256](#), amended by [S.I. 2010/675](#); there are other amending instruments but none is relevant.

### Measuring Instruments (Automatic Catchweighers) Regulations 2006

**19.** In regulation 18(5) of the Measuring Instruments (Automatic Catchweighers) Regulations 2006 <sup>M214</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.

#### Marginal Citations

**M214** [S.I. 2006/1257](#), amended by [S.I. 2010/675](#); there are other amending instruments but none is relevant.

### Measuring Instruments (Automatic Gravimetric Filling Instruments) Regulations 2006

**20.** In Part 1 of Schedule 5 to the Measuring Instruments (Automatic Gravimetric Filling Instruments) Regulations 2006 <sup>M215</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.



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#### Marginal Citations

**M215** [S.I. 2006/1258](#), amended by [S.I. 2010/675](#); there are other amending instruments but none is relevant.

### Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006

**21.** In regulation 17(4) of the Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 <sup>M216</sup>—

- (a) for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) for “the 2007 Regulations”, in both places it occurs, substitute “ the 2016 Regulations ”.

#### Marginal Citations

**M216** [S.I. 2006/1379](#), to which there are amendments not relevant to these Regulations.

### Contaminated Land (England) Regulations 2006

**22.**—(1) The Contaminated Land (England) Regulations 2006 <sup>M217</sup> are amended as follows.

(2) In regulation 2(1)(e), omit “or by means of Part A(1) mobile plant”.

(3) After regulation 2(1)(e) insert—

“(ea) land on which an activity has been carried on by means of Part A(1) mobile plant under a permit, where the activity did not solely consist of things being done which were required by way of remediation;”.

(4) In regulation 2(4), for “and “Part A(1) mobile plant” have the same meanings as in the Environmental Permitting (England and Wales) Regulations 2010” substitute “ has the same meaning as in the Environmental Permitting (England and Wales) Regulations 2016 ”.

(5) After regulation 2(4) insert—

“(4A) In paragraph (1)(ea), “Part A(1) mobile plant” has the same meaning as in the Environmental Permitting (England and Wales) Regulations 2010 as those Regulations were in force on 26th February 2013 <sup>M218</sup>, and “permit” has the same meaning as “environmental permit” in those Regulations as at that date.”.

(6) In paragraph 16 of Schedule 3, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M217** [S.I. 2006/1380](#); relevant amending instruments are [S.I. 2007/3538](#) and [2010/675](#).

**M218** The date of 26th February 2013 was the day before [S.I. 2010/675](#) was amended by [S.I. 2013/390](#), removing references to Part A(1) mobile plant.

### Radioactive Contaminated Land (Modification of Enactments) (Wales) Regulations 2006

**23.** In regulation 17(4) of the Radioactive Contaminated Land (Modification of Enactments) (Wales) Regulations 2006 <sup>M219</sup>—

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (a) for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) for “the 2007 Regulations”, in both places it occurs, substitute “ the 2016 Regulations ”.

#### Marginal Citations

**M219 S.I. 2006/2988** (W. 277), amended by **S.I. 2008/521**; there are other amending instruments but none is relevant.

### Contaminated Land (Wales) Regulations 2006

**24.**—(1) The Contaminated Land (Wales) Regulations 2006 <sup>M220</sup> are amended as follows.

(2) In regulation 2—

(a) in the English language text—

(i) in paragraph (1)(e) omit “or by means of Part A(1) mobile plant”;

(ii) after paragraph (1)(e) insert—

“(ea) land on which an activity has been carried on by means of Part A(1) mobile plant under a permit, where the activity did not solely consist of things being done which were required by way of remediation;”;

(iii) in paragraph (4) for “and “Part A(1) mobile plant” have the same meanings as in the Environmental Permitting (England and Wales) Regulations 2010” substitute “ has the same meaning as in the Environmental Permitting (England and Wales) Regulations 2016 ”;

(iv) after paragraph (4) insert—

“(4A) In paragraph (1)(ea), “Part A(1) mobile plant” has the same meaning as in the Environmental Permitting (England and Wales) Regulations 2010 as those Regulations were in force on 26th February 2013, and “permit” has the same meaning as “environmental permit” in those Regulations as at that date.”;

(b) in the Welsh language text—

(i) in paragraph (1)(d), omit “neu trwy gyfrwng gwaith symudol Rhan A(1)”;

(ii) after paragraph (1)(d) insert—

“(da) tir lle mae gweithgaredd wedi'i gynnal trwy gyfrwng gwaith symudol Rhan A(1) o dan drwydded, pan nad yw'r gweithgaredd yn cynnwys pethau sy'n cael eu gwneud ac y mae'n ofynnol eu gwneud o ran gwaith adfer;”;

(iii) for paragraph (4) substitute—

“(4) Ym mharagraff (1)(d), mae i “gweithfan Rhan A(1)” yr ystyr a roddir i “Part A(1) installation” yn Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016, ac mae i “trwydded” yr ystyr a roddir i “environmental permit” yn y Rheoliadau hynny.”;

(iv) after paragraph (4) insert—

“(4A) Ym mharagraff (1)(da), mae i “gwaith symudol Rhan A(1)” yr ystyr a roddir i “Part A(1) mobile plant” yn Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010 fel yr oedd mewn grym ar 26 Chwefror 2013, ac mae i “trwydded” yr ystyr a roddir i “environmental permit” yn y Rheoliadau hynny ar y dyddiad hwnnw.”.

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- (3) In paragraph 16 of Schedule 3—
- (a) in the English language text, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in the Welsh language text—
- (i) in the words before sub-paragraph (a), for “gydsyniad a roddwyd o dan Bennod 2 o Ran 3 o Ddeddf Adnoddau Dwr 1991 (troseddau llygru)” substitute “ trwydded amgylcheddol a roddir o dan reoliad 13 o Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”;
- (ii) in sub-paragraph (a), for “cydsyniad” substitute “ trwydded amgylcheddol ”.

**Marginal Citations**

M220 S.I. 2006/2989 (W. 278); relevant amending instruments are S.I. 2007/3538 and 2010/675.

**Producer Responsibility Obligations (Packaging Waste) Regulations 2007**

25. In regulation 2(2) of the Producer Responsibility Obligations (Packaging Waste) Regulations 2007<sup>M221</sup>, in the definition of “relevant authorisation”, for “the Environmental Permitting (England and Wales) Regulations 2010”, in both places it occurs, substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M221 S.I. 2007/871; relevant amending instruments are S.I. 2007/3538 and 2010/675.

**Persistent Organic Pollutants Regulations 2007**

26. In regulation 4(1)(b) and (2) of the Persistent Organic Pollutants Regulations 2007<sup>M222</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M222 S.I. 2007/3106, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

**Cremation (England and Wales) Regulations 2008**

27. In regulation 29(2) of the Cremation (England and Wales) Regulations 2008<sup>M223</sup>, in the definitions of “incinerated” and “permit”, for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M223 S.I. 2008/2841, to which there are amendments not relevant to these Regulations.

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### Co-ordination of Regulatory Enforcement (Enforcement Action) Order 2009

**28.** In regulation 2(1) of the Co-ordination of Regulatory Enforcement (Enforcement Action) Order 2009 <sup>M224</sup>—

- (a) in paragraph (m)(vi), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph (n), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M224** S.I. 2009/665, amended by S.I. 2014/3070; there are other amending instruments but none is relevant.

### Waste Batteries and Accumulators Regulations 2009

**29.** In paragraph 12(2) of Schedule 4 to the Waste Batteries and Accumulators Regulations 2009 <sup>M225</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010”, in both places it occurs, substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

**M225** S.I. 2009/890, amended by S.I. 2010/675; there are other amending instruments but none is relevant.

### Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009

**30.**—(1) The Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009 <sup>M226</sup> are amended as follows.

- (2) In regulation 10—
  - (a) in the English language text, in the heading and in paragraph (1), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in the Welsh language text—
    - (i) in the heading, for “Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”;
    - (ii) in paragraph (1), for “Reoliadau Caniatáu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”.
- (3) In regulation 11(1)—
  - (a) in the English language text, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in the Welsh language text, for “Reoliadau Caniatáu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”.
- (4) In paragraph 1(a) of Schedule 3—
  - (a) in the English language text, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;

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- (b) in the Welsh language text, for “Reoliadau Caniatáu Amgylcheddol (Cymru a Lloegr) 2010” substitute “Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016”.

**Marginal Citations**

**M226** S.I. 2009/995 (W. 81), amended by S.I. 2012/630; there are other amending instruments but none is relevant.

**Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009**

**31.**—(1) The Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009 <sup>M227</sup> are amended as follows.

(2) In regulation 2—

- (a) for the definition of “the 2010 Regulations” substitute—

““the 2016 Regulations” means the Environmental Permitting (England and Wales) Regulations 2016;”;

- (b) for the definition of “competent authority” substitute—

““competent authority” means, in relation to an area, the fire and rescue authority under the Fire and Rescue Services Act 2004 <sup>M228</sup> for that area;”;

- (c) in the definition of “operator”, for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “the 2016 Regulations”;

- (d) in the definition of “regulator”, for “the 2010 Regulations”, in both places it occurs, substitute “the 2016 Regulations”.

(3) In regulation 9(3), for “the Environmental Permitting (England and Wales) Regulations 2007” substitute “the 2016 Regulations”.

**Marginal Citations**

**M227** S.I. 2009/1927, amended by S.I. 2013/755 (W. 90); there are other amending instruments but none is relevant.

**M228** 2004. c. 21; section 1 was amended by paragraph 10(1) and (2) of Part 1 of Schedule 2 to the [Civil Contingencies Act 2004](#) (c. 36).

**Corporation Tax (Land Remediation Relief) Order 2009**

**32.** In article 4(2)(b) of the Corporation Tax (Land Remediation Relief) Order 2009 <sup>M229</sup>, for paragraph (i) substitute—

“(i) the Environmental Permitting (England and Wales) Regulations 2016,”.

**Marginal Citations**

**M229** S.I. 2009/2037.

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**Mercury Export and Data (Enforcement) Regulations 2010**

**33.** In regulation 5(4)(a) of the Mercury Export and Data (Enforcement) Regulations 2010 <sup>M230</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
**M230** [S.I. 2010/265](#), amended by [S.I. 2012/630](#); there are other amending instruments but none is relevant.

**Conservation of Habitats and Species Regulations 2010**

<sup>F329</sup>**34.** .....

**Textual Amendments**  
**F329** Sch. 29 Pt. 2 para. 34 omitted (30.11.2017) by [The Conservation of Habitats and Species Regulations 2017 \(S.I. 2017/1012\)](#), reg. 1(2), [Sch. 6 para. 73\(4\)](#)

**River Mersey (Mersey Gateway Bridge) Order 2011**

**35.** In article 14(7) of the River Mersey (Mersey Gateway Bridge) Order 2011 <sup>M231</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
**M231** [S.I. 2011/41](#).

**Waste (England and Wales) Regulations 2011**

- 36.**—(1) The Waste (England and Wales) Regulations 2011 <sup>M232</sup> are amended as follows.
- (2) After regulation 29(5A)(z), insert—
  - “(z1) regulation 38 of the Environmental Permitting (England and Wales) Regulations 2016.”.
- (3) In regulation 35(2)(c)—
  - (a) in paragraph (v), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (b) in paragraph (vi), for “regulation 68(2) of the Environmental Permitting (England and Wales) Regulations 2010” substitute “ regulation 4(3) of the Environmental Permitting (England and Wales) Regulations 2016 ”.
- (4) In regulation 46(1)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.
- (5) In regulation 47—
  - (a) in paragraphs (1)(b)(i) and (4), for “the Environmental Permitting (England and Wales) Regulations 2010”, in each place it occurs, substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;

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- (b) in paragraph (4), in the definitions of “radioactive substances exemption” and “specified waste”, for “Part 7”, in each place it occurs, substitute “ Part 6 ”.

**Marginal Citations**

M232 S.I. 2011/988; relevant amending instruments are S.I. 2011/2043, 2013/755 (W. 90) and 2014/656.

**Network Rail (Hitchin (Cambridge Junction)) Order 2011**

37. In article 14(7) of the Network Rail (Hitchin (Cambridge Junction)) Order 2011<sup>M233</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M233 S.I. 2011/1072.

**Town and Country Planning (Environmental Impact Assessment) Regulations 2011**

38. In paragraph 2 of Schedule 2 to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011<sup>M234</sup>, at sub-paragraph 3(g) of the table, in paragraph (ii) of column 2—

- (a) for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) for “paragraph 5(2)(b), (2)(c) or (4)” substitute “ paragraph 11(2)(b), (2)(c) or (4) ”.

**Marginal Citations**

M234 S.I. 2011/1824, to which there are amendments not relevant to these Regulations.

**Renewable Heat Incentive Scheme Regulations 2011**

39.—(1) The Renewable Heat Incentive Scheme Regulations 2011<sup>M235</sup> are amended as follows.

(2) In regulation 2(1), in the definition of “environmental permit”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 1(2)(m) of Schedule 1, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M235 S.I. 2011/2860; relevant amending instruments are S.I. 2013/2410 and 2016/257.

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## Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012

40. In regulation 3(4) of the Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012 <sup>M236</sup>, for paragraph (a) of the definition of “solvent emission activity” substitute—

“(a) Schedule 14 to the Environmental Permitting (England and Wales) Regulations 2016;”.

### Marginal Citations

**M236** [S.I. 2012/1715](#), amended by [S.I. 2013/390](#); there are other amending instruments but none is relevant.

## Ipswich Barrier Order 2012

41. In article 13(4) of the Ipswich Barrier Order 2012 <sup>M237</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

### Marginal Citations

**M237** [S.I. 2012/1867](#).

## Network Rail (Ipswich Chord) Order 2012

42. In article 13(7) of the Network Rail (Ipswich Chord) Order 2012 <sup>M238</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

### Marginal Citations

**M238** [S.I. 2012/2284](#), to which there are amendments not relevant to these Regulations.

## Network Rail (North Doncaster Chord) Order 2012

43. In article 20(7) of the Network Rail (North Doncaster Chord) Order 2012 <sup>M239</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

### Marginal Citations

**M239** [S.I. 2012/2635](#), to which there are amendments not relevant to these Regulations.

## Chiltern Railways (Bicester to Oxford Improvements) Order 2012

44. In article 19(7) of the Chiltern Railways (Bicester to Oxford Improvements) Order 2012 <sup>M240</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.



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**Marginal Citations**

[M240 S.I. 2012/2679](#).

**Climate Change Agreements (Eligible Facilities) Regulations 2012**

45. In paragraphs 23 and 36(a) of the Schedule to the Climate Change Agreements (Eligible Facilities) Regulations 2012 <sup>M241</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.

**Marginal Citations**

[M241 S.I. 2012/2999](#), to which there are amendments not relevant to these Regulations.

**Greenhouse Gas Emissions Trading Scheme Regulations 2012**

46. For paragraph 1(2)(b)(i) of Schedule 4 to the Greenhouse Gas Emissions Trading Scheme Regulations 2012 (permits) <sup>M242</sup>, substitute—

“(i) the Environmental Permitting (England and Wales) Regulations 2016;”.

**Marginal Citations**

[M242 S.I. 2012/3038](#), to which there are amendments not relevant to these Regulations.

**Crossrail (Kensal Green) Order 2013**

47. In article 5(7) of the Crossrail (Kensal Green) Order 2013 <sup>M243</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.

**Marginal Citations**

[M243 S.I. 2013/198](#).

**Brechfa Forest West Wind Farm Order 2013**

48. In article 12(7) of the Brechfa Forest West Wind Farm Order 2013 <sup>M244</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “the Environmental Permitting (England and Wales) Regulations 2016”.

**Marginal Citations**

[M244 S.I. 2013/586](#), to which there are amendments not relevant to these Regulations.

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### **Hinkley Point C (Nuclear Generating Station) Order 2013**

49. In article 21(7) of the Hinkley Point C (Nuclear Generating Station) Order 2013 <sup>M245</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

.....  
**Marginal Citations**

M245 S.I. 2013/648, to which there are amendments not relevant to these Regulations.

### **Lancashire County Council (Torrisholme to the M6 Link (A683 Completion of Heysham to M6 Link Road)) Order 2013**

50. In article 16(7) of the Lancashire County Council (Torrisholme to the M6 Link (A683 Completion of Heysham to M6 Link Road)) Order 2013 <sup>M246</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

.....  
**Marginal Citations**

M246 S.I. 2013/675, to which there are amendments not relevant to these Regulations.

### **Leeds Railway Station (Southern Entrance) Order 2013**

51. In article 13(7) of the Leeds Railway Station (Southern Entrance) Order 2013 <sup>M247</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

.....  
**Marginal Citations**

M247 S.I. 2013/1933.

### **Croxley Rail Link Order 2013**

52. In article 13(7) of the Croxley Rail Link Order 2013 <sup>M248</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

.....  
**Marginal Citations**

M248 S.I. 2013/1967.

### **Scrap Metal Dealers Act 2013 (Prescribed Relevant Offences and Relevant Enforcement Action) Regulations 2013**

53.—(1) The Scrap Metal Dealers Act 2013 (Prescribed Relevant Offences and Relevant Enforcement Action) Regulations 2013 <sup>M249</sup> are amended as follows.

(2) In regulation 3(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(3) In Part 2 of the Schedule, after paragraph (b), insert—

“(bb) An offence under regulation 38 of the Environmental Permitting (England and Wales) Regulations 2016”.

**Marginal Citations**  
M249 S.I. 2013/2258.

### **Transport for Greater Manchester (Light Rapid Transit System) (Second City Crossing) Order 2013**

54. In article 20(7) of the Transport for Greater Manchester (Light Rapid Transit System) (Second City Crossing) Order 2013 <sup>M250</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
M250 S.I. 2013/2587.

### **M1 Junction 10a (Grade Separation) Order 2013**

55. In article 16(7) of the M1 Junction 10a (Grade Separation) Order 2013 <sup>M251</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
M251 S.I. 2013/2808.

### **Network Rail (Redditch Branch Enhancement) Order 2013**

56. In article 13(7) of the Network Rail (Redditch Branch Enhancement) Order 2013 <sup>M252</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
M252 S.I. 2013/2809.

### **Waste Electrical and Electronic Equipment Regulations 2013**

57. In regulation 2(1) of the Waste Electrical and Electronic Equipment Regulations 2013 <sup>M253</sup>, in the definition of “relevant authorisation”, for “the Environmental Permitting (England and Wales) Regulations 2010”, in both places it occurs, substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

[M253 S.I. 2013/3113](#), to which there are amendments not relevant to these Regulations.

**National Grid (King's Lynn B Power Station Connection) Order 2013**

**58.** In article 14(7) and (8)(b) of the National Grid (King's Lynn B Power Station Connection) Order 2013 <sup>M254</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M254 S.I. 2013/3200](#).

**Ashton Vale to Temple Meads and Bristol City Centre Rapid Transit Order 2013**

**59.** In article 17(7) of the Ashton Vale to Temple Meads and Bristol City Centre Rapid Transit Order 2013 <sup>M255</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M255 S.I. 2013/3244](#).

**Network Rail (Norton Bridge Area Improvements) Order 2014**

**60.** In article 18(7) of the Network Rail (Norton Bridge Area Improvements) Order 2014 <sup>M256</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M256 S.I. 2014/909](#).

**National Grid (North London Reinforcement Project) Order 2014**

**61.** In article 17(7) and (10)(c) of the National Grid (North London Reinforcement Project) Order 2014 <sup>M257</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M257 S.I. 2014/1052](#).

**East Anglia ONE Offshore Wind Farm Order 2014**

**62.—**(1) The East Anglia ONE Offshore Wind Farm Order 2014 <sup>M258</sup> is amended as follows.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(2) In article 13(7) and (8)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 4(a) of Part 4 of Schedule 9, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M258 S.I. 2014/1599](#), to which there are amendments not relevant to these Regulations.

**Daventry International Rail Freight Interchange Alteration Order 2014**

**63.** In article 17(7) of the Daventry International Rail Freight Interchange Alteration Order 2014 <sup>M259</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M259 S.I. 2014/1796](#).

**Rampion Offshore Wind Farm Order 2014**

**64.** In article 20(7) of the Rampion Offshore Wind Farm Order 2014 <sup>M260</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M260 S.I. 2014/1873](#), to which there are amendments not relevant to these Regulations.

**Network Rail (Huyton) Order 2014**

**65.** In article 13(7) of the Network Rail (Huyton) Order 2014 <sup>M261</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M261 S.I. 2014/2027](#).

**A556 (Knutsford to Bowdon Improvement) Development Consent Order 2014**

**66.** In article 15(7) of the A556 (Knutsford to Bowdon Improvement) Development Consent Order 2014 <sup>M262</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

M262 S.I. 2014/2269.

**Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014**

67. In article 19(7) of the Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014<sup>M263</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M263 S.I. 2014/2384, to which there are amendments not relevant to these Regulations.

**North Killingholme (Generating Station) Order 2014**

68.—(1) The North Killingholme (Generating Station) Order 2014<sup>M264</sup> is amended as follows.

(2) In article 14(7) and (8), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 4(a) of Part 1 of Schedule 8, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M264 S.I. 2014/2434, to which there are amendments not relevant to these Regulations.

**Clocaenog Forest Wind Farm Order 2014**

69. In article 18(7) of the Clocaenog Forest Wind Farm Order 2014<sup>M265</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M265 S.I. 2014/2441.

**Central Bedfordshire Council (Woodside Link Houghton Regis) Development Consent Order 2014**

70. In article 16(7) of the Central Bedfordshire Council (Woodside Link Houghton Regis) Development Consent Order 2014<sup>M266</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M266 S.I. 2014/2637.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### South Hook Combined Heat and Power Plant Order 2014

71. In article 2 of the South Hook Combined Heat and Power Plant Order 2014 <sup>M267</sup>, in the definition of “the Environmental Permitting Regulations”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

M267 S.I. 2014/2846.

### Able Marine Energy Park Development Consent Order 2014

72.—(1) The Able Marine Energy Park Development Consent Order 2014 <sup>M268</sup> is amended as follows.

(2) In article 20(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 102(a) of Part 11 of Schedule 9, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

M268 S.I. 2014/2935.

### Walney Extension Offshore Wind Farm Order 2014

73. In article 15(7) and (9)(b) of the Walney Extension Offshore Wind Farm Order 2014 <sup>M269</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

M269 S.I. 2014/2950, to which there are amendments not relevant to these Regulations.

### London Underground (Northern Line Extension) Order 2014

74. In article 16(7) of the London Underground (Northern Line Extension) Order 2014 <sup>M270</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

M270 S.I. 2014/3102.

*Changes to legislation:* The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Common Agricultural Policy (Integrated Administration and Control System and Enforcement and Cross Compliance) (Wales) Regulations 2014**

75. In paragraph 3 of Schedule 1 to the Common Agricultural Policy (Integrated Administration and Control System and Enforcement and Cross Compliance) (Wales) Regulations 2014 <sup>M271</sup>—

- (a) in the English language text—
  - (i) for “the Environmental Permitting (England and Wales) Regulations 2010”, in each place it occurs, substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
  - (ii) in sub-paragraph (2), for “regulation 35(2)(p)” substitute “ regulation 35(2) ”;
- (b) in the Welsh language text—
  - (i) in sub-paragraph (1), for “Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”;
  - (ii) in sub-paragraph (2), for “rheoliad 35(2)(p) o Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ rheoliad 35(2) o Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”;
  - (iii) in sub-paragraph (3), for “Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010”, in both places it occurs, substitute “ Rheoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”.

**Marginal Citations**  
 M271 S.I. 2014/3223 (W. 328), to which there are amendments not relevant to these Regulations.

**Common Agricultural Policy (Control and Enforcement, Cross-Compliance, Scrutiny of Transactions and Appeals) Regulations 2014**

<sup>F330</sup>76. ....

**Textual Amendments**  
 F330 Sch. 29 Pt. 2 para. 76 revoked (1.1.2024) by The Agriculture (Removal of Cross-Compliance and Miscellaneous Revocations and Amendments, etc.) (England) Regulations 2023 (S.I. 2023/816), reg., Sch. Pt. 1 para. 1 Table 2 (with Sch. Pt. 2 para. 2)

**Willington C Gas Pipeline Order 2014**

77. In article 14(7) and (8)(b) of the Willington C Gas Pipeline Order 2014 <sup>M272</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
 M272 S.I. 2014/3328, to which there are amendments not relevant to these Regulations.

**Hornsea One Offshore Wind Farm Order 2014**

78.—(1) The Hornsea One Offshore Wind Farm Order 2014 <sup>M273</sup> is amended as follows.



**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(2) In article 12(7) and (9)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 61(a) of Part 6 of Schedule 12, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M273 S.I. 2014/3331](#), to which there are amendments not relevant to these Regulations.

**Northumberland County Council (A1 – South East Northumberland Link Road (Morpeth Northern Bypass)) Development Consent Order 2015**

**79.** In article 18(7) of the Northumberland County Council (A1 – South East Northumberland Link Road (Morpeth Northern Bypass)) Development Consent Order 2015 <sup>M274</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M274 S.I. 2015/23](#).

**A160/A180 (Port of Immingham Improvement) Development Consent Order 2015**

**80.**—(1) The A160/A180 (Port of Immingham Improvement) Development Consent Order 2015 <sup>M275</sup> is amended as follows.

(2) In article 16(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 17(a) of Part 2 of Schedule 8, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M275 S.I. 2015/129](#), to which there are amendments not relevant to these Regulations.

**Cornwall Council (A30 Temple to Higher Carblake Improvement) Order 2015**

**81.**—(1) The Cornwall Council (A30 Temple to Higher Carblake Improvement) Order 2015 <sup>M276</sup> is amended as follows.

(2) In article 16(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In paragraph 11(3) of Schedule 2, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

M276 S.I. 2015/147, to which there are amendments not relevant to these Regulations.

**Dogger Bank Creyke Beck Offshore Wind Farm Order 2015**

82. In article 17(7) of the Dogger Bank Creyke Beck Offshore Wind Farm Order 2015<sup>M277</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M277 S.I. 2015/318, to which there are amendments not relevant to these Regulations.

**Ship Recycling Facilities Regulations 2015**

83. In regulation 2 of the Ship Recycling Facilities Regulations 2015<sup>M278</sup>, in the definitions of “permit” and “suspension notice”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M278 S.I. 2015/430.

**Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015**

84. In Schedule 2 of the Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015<sup>M279</sup>—

- (a) in Part 1, for “Environmental Permitting (England and Wales) Regulations 2010” substitute “ Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in Part 2, for “Environmental Permitting (England and Wales) Regulations 2010” substitute “ Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M279 S.I. 2015/462, to which there are amendments not relevant to these Regulations.

**Control of Major Accidents Hazards Regulations 2015**

85.—(1) The Control of Major Accidents Hazards Regulations 2015<sup>M280</sup> are amended as follows.

(2) In regulation 2—

- (a) omit the definition of “the 2010 Regulations”;
- (b) in the appropriate place insert—  
““the 2016 Regulations” means the Environmental Permitting (England and Wales) Regulations 2016;”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(3) In regulation 21(1), for “the 2010 Regulations” substitute “ the 2016 Regulations ”.

(4) In regulation 25(7)(c) and (11)(a), for “the 2010 Regulations” substitute “ the 2016 Regulations ”.

**Marginal Citations**

M280 S.I. 2015/483, to which there are amendments not relevant to these Regulations.

**Town and Country Planning (General Permitted Development) (England) Order 2015**

86. In Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015 <sup>M281</sup> —

- (a) in section L.3 of Part 7, in the definitions of “waste management facility” and “waste operation”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in section N.1 of Part 17, in the definition of “groundwater”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M281 S.I. 2015/596, amended by S.I. 2016/332; there are other amending instruments but none is relevant.

**Nitrate Pollution Prevention Regulations 2015**

87. In regulation 2(1) of the Nitrate Pollution Prevention Regulations 2015 <sup>M282</sup>, in the definition of “anaerobic digestion”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M282 S.I. 2015/668.

**Knottingley Power Plant Order 2015**

88. In article 15(7) of the Knottingley Power Plant Order 2015 <sup>M283</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M283 S.I. 2015/680, to which there are amendments not relevant to these Regulations.

**Network Rail (Ordsall Chord) Order 2015**

89. In article 17(7) of the Network Rail (Ordsall Chord) Order 2015 <sup>M284</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

M284 S.I. 2015/780.

**Environmental Damage (Prevention and Remediation) (England) Regulations 2015**

**90.**—(1) The Environmental Damage (Prevention and Remediation) (England) Regulations 2015<sup>M285</sup> are amended as follows.

(2) In the heading of regulation 10, and in regulation 10(1), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In regulation 11(1), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(4) In paragraph 1(a) of Schedule 4, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M285 S.I. 2015/810, to which there are amendments not relevant to these Regulations.

**White Moss Landfill Order 2015**

**91.** In article 9(7) of the White Moss Landfill Order 2015<sup>M286</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M286 S.I. 2015/1317.

**Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order 2015**

**92.** In article 17(7) of the Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order 2015<sup>M287</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M287 S.I. 2015/1347.

**Hazardous Waste (Miscellaneous Amendments) Regulations 2015**

**93.** In paragraph 3 of Schedule 2 to the Hazardous Waste (Miscellaneous Amendments) Regulations 2015<sup>M288</sup>, in the definitions of “permit” and “standard rule”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

[M288 S.I. 2015/1360](#).

### Swansea Bay Tidal Generating Station Order 2015

94. In article 13(7) of the Swansea Bay Tidal Generating Station Order 2015 <sup>M289</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M289 S.I. 2015/1386](#), to which there are amendments not relevant to these Regulations.

### Preesall Underground Gas Storage Facility Order 2015

95. In article 15(7) of the Preesall Underground Gas Storage Facility Order 2015 <sup>M290</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M290 S.I. 2015/1561](#), to which there are amendments not relevant to these Regulations.

### Progress Power (Gas Fired Power Station) Order 2015

96.—(1) The Progress Power (Gas Fired Power Station) Order 2015 <sup>M291</sup> is amended as follows.

(2) In article 2(1), in the definition of “gross rated electrical output”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 15(7) and (8)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M291 S.I. 2015/1570](#), to which there are amendments not relevant to these Regulations.

### Hirwaun Generating Station Order 2015

97.—(1) The Hirwaun Generating Station Order 2015 <sup>M292</sup> is amended as follows.

(2) In article 2(1), in the definition of “gross rated electrical output”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 14(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

[M292 S.I. 2015/1574](#), to which there are amendments not relevant to these Regulations.

**Dogger Bank Teesside A and B Offshore Wind Farm Order 2015**

**98.** In article 18(7) of the Dogger Bank Teesside A and B Offshore Wind Farm Order 2015 <sup>M293</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M293 S.I. 2015/1592](#).

**Ferrybridge Multifuel 2 Power Station Order 2015**

**99.**—(1) The Ferrybridge Multifuel 2 Power Station Order 2015 <sup>M294</sup> is amended as follows.  
(2) In article 2(1), for the definition of “2010 Regulations” substitute—  
““2016 Regulations” means the Environmental Permitting (England and Wales) Regulations 2016;”.  
(3) In article 12(7) and (8), for “the 2010 Regulations” substitute “ the 2016 Regulations ”.  
(4) In paragraph 49(1) of Schedule 2, in the definition of “environmental permit”, for “the 2010 Regulations” substitute “ the 2016 Regulations ”.

**Marginal Citations**

[M294 S.I. 2015/1832](#), to which there are amendments not relevant to these Regulations.

**Network Rail (Tinsley Chord) Order 2015**

**100.** In article 8(8) of the Network Rail (Tinsley Chord) Order 2015 <sup>M295</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M295 S.I. 2015/1876](#).

**Large Combustion Plants (Transitional National Plan) Regulations 2015**

**101.** In regulation 2(1) of the Large Combustion Plants (Transitional National Plan) Regulations 2015 <sup>M296</sup>, in the definitions of “permit” and “permitting functions”, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M296 S.I. 2015/1973](#).

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Port Talbot Steelworks Generating Station Order 2015

**102.** In article 10(7) of the Port Talbot Steelworks Generating Station Order 2015 <sup>M297</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M297 S.I. 2015/1984.](#)

### London Underground (Bank Station Capacity Upgrade) Order 2015

**103.** In article 17(7) of the London Underground (Bank Station Capacity Upgrade) Order 2015 <sup>M298</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M298 S.I. 2015/2044.](#)

### East Midlands Gateway Rail Freight Interchange and Highway Order 2016

**104.** In article 22(7) of the East Midlands Gateway Rail Freight Interchange and Highway Order 2016 <sup>M299</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M299 S.I. 2016/17.](#)

### National Grid (Hinkley Point C Connection Project) Order 2016

**105.** In article 16(7), (8) and (10)(b) of the National Grid (Hinkley Point C Connection Project) Order 2016 <sup>M300</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M300 S.I. 2016/49.](#)

### Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016

**106.** In paragraph 2 of Schedule 2 to the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016 <sup>M301</sup>, at sub-paragraph 3(g) of the table, in paragraph (ii) of column 2—

- (a) in the English language text, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (b) in the Welsh language text, for “Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”.

**Marginal Citations**

M301 S.I. 2016/58 (W. 28).

**A19/A1058 Coast Road (Junction Improvement) Development Consent Order 2016**

107. In article 15(7) of the A19/A1058 Coast Road (Junction Improvement) Development Consent Order 2016<sup>M302</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M302 S.I. 2016/73.

**Palm Paper Mill Generating Station Order 2016**

108. In article 10(7) and (8)(c) of the Palm Paper Mill Generating Station Order 2016<sup>M303</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M303 S.I. 2016/166.

**Thorpe Marsh Gas Pipeline Order 2016**

109. In article 17(7) and (8)(b) of the Thorpe Marsh Gas Pipeline Order 2016<sup>M304</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

M304 S.I. 2016/297.

**Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016**

110. In regulation 3(3) of the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016<sup>M305</sup>—

- (a) in the English language text, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in the Welsh language text, for “Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2010” substitute “ Reoliadau Trwyddedu Amgylcheddol (Cymru a Lloegr) 2016 ”.



**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

**Marginal Citations**

[M305 S.I. 2016/359](#) (W. 112).

**Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016**

**111.** In regulation 2(4) of the Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016 <sup>M306</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M306 S.I. 2016/384](#).

**The Midland Metro (Birmingham City Centre Extension, etc.) (Land Acquisition and Variation) Order 2016**

**112.** In article 15(7) of the Midland Metro (Birmingham City Centre Extension, etc.) (Land Acquisition and Variation) Order 2016 <sup>M307</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M307 S.I. 2016/545](#).

**The A14 Cambridge to Huntingdon Improvement Scheme Development Consent Order 2016**

**113.—(1)** The A14 Cambridge to Huntingdon Improvement Scheme Development Consent Order 2016 <sup>M308</sup> is amended as follows.

(2) In article 3 of Part 1—

- (a) in paragraph (1)(a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph (2), for “Schedule 23ZA (flood risk activities and excluded flood risk activities) to the Environmental Permitting (England and Wales) Regulations 2010” substitute “ Schedule 25 (flood risk activities and excluded flood risk activities) to the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 17(6) of Part 4, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**

[M308 S.I. 2016/547](#).

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### The Midland Metro (Wolverhampton City Centre Extension) Order 2016

114.—(1) Part 2 of the Midland Metro (Wolverhampton City Centre Extension) Order 2016 <sup>M309</sup> is amended as follows.

(2) In article 6—

- (a) in paragraph (9), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”;
- (b) in paragraph (10), for “Schedule 23ZA (flood risk activities and excluded flood risk activities) to the Environmental Permitting (England and Wales) Regulations 2010” substitute “ Schedule 25 (flood risk activities and excluded flood risk activities) to the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 20(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M309 S.I. 2016/684.](#)

### The York Potash Harbour Facilities Order 2016

115. In article 14(7) of the York Potash Harbour Facilities Order 2016 <sup>M310</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M310 S.I. 2016/772.](#)

### The Meaford Gas Fired Generating Station Order 2016

116. In article 16(6) of the Meaford Gas Fired Generating Station Order 2016 <sup>M311</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M311 S.I. 2016/779.](#)

### The North Wales Wind Farms Connection Order 2016

117. In article 16(8) of the North Wales Wind Farms Connection Order 2016 <sup>M312</sup>, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

**Marginal Citations**  
[M312 S.I. 2016/818.](#)

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### The Hornsea Two Offshore Wind Farm Order 2016

**118.**—(1) The Hornsea Two Offshore Wind Farm Order 2016 <sup>M313</sup> is amended as follows.

(2) In article 3(1)(a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 15(7) and (9)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(4) In paragraph 5(a) of Part 6 of Schedule 12, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

[M313 S.I. 2016/844.](#)

### The River Humber Gas Pipeline Replacement Order 2016

**119.**—(1) The River Humber Gas Pipeline Replacement Order 2016 <sup>M314</sup> is amended as follows.

(2) In article 3(1)(a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 18(7) and (8)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(4) In paragraph 1(4)(a) of Part 4 of Schedule 10, for “the Environmental Permitting Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

[M314 S.I. 2016/853.](#)

### The M4 Motorway (Junctions 3 to 12) (Smart Motorway) Development Consent Order 2016

**120.**—(1) The M4 Motorway (Junctions 3 to 12) (Smart Motorway) Development Consent Order 2016 <sup>M315</sup> is amended as follows.

(2) In article 16(6), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 17(7) and (8)(b), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

[M315 S.I. 2016/863.](#)

### The Triton Knoll Electrical System Order 2016

**121.**—(1) The Triton Knoll Electrical System Order 2016 <sup>M316</sup> is amended as follows.

**Changes to legislation:** The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

(2) In article 6(2)(a), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(3) In article 12(7), for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

(4) In paragraph 5(a) of Part 4 of Schedule 8, for “the Environmental Permitting (England and Wales) Regulations 2010” substitute “ the Environmental Permitting (England and Wales) Regulations 2016 ”.

#### Marginal Citations

M316 S.I. 2016/880.

## EXPLANATORY NOTE

*(This note is not part of the Regulations)*

These Regulations provide a consolidated system of environmental permitting in England and Wales. They replace the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675).

These Regulations transpose provisions of 15 Directives which impose obligations required to be delivered through permits or capable of being delivered through permits.

Part 1 contains general provisions, in particular interpretation.

Regulation 8 defines the term “regulated facility” and regulation 12 requires every regulated facility to be operated under the authority of an environmental permit.

The combined classes of “regulated facility” include (unless they are exempt or excluded) every installation, mobile plant, waste operation, mining waste operation, radioactive substances activity, water discharge activity, groundwater activity and flood risk activities, whether or not carried on as part of the operation of another regulated facility. Those terms are defined in regulation 2(1) and in Schedules 1, 9, 20 to 23 and 25.

The term “exempt facility” is defined in regulation 5. Schedule 2 sets out the procedures in relation to exempt facilities, including registration requirements.

Part 2 sets out the procedures in relation to environmental permits.

Regulations 13 (grant of a permit), 20 (variation of a permit), 21 (transfer of a permit) and 25 (surrender of a permit), with Part 1 of Schedule 5, regulate permit applications. Regulation 20 also provides for variation of a permit on the initiative of the regulator. Regulation 24 allows certain permits to be surrendered by notification. Regulation 15 and Part 2 of Schedule 5 provide for compensation where a permit condition requires interference with the property rights of a person other than the operator. Regulation 17 allows more than one regulated facility on the same site, or with the same operator, to be authorised by the same permit in some circumstances. Regulation 18 allows for the consolidation of separate permits. Regulations 22 and 23 provide for the revocation of a permit on the initiative of the regulator. Regulations 26 to 30 provide for the preparation of standard rules applying to a description of regulated facility, which may be incorporated into a permit at the request of an operator. Regulation 31 and Schedule 6 provide for appeals.

Part 3 provide for the discharge of functions by the regulator in relation to permits. Regulation 32 sets the regulator for different classes or description of regulated facility and regulation 33 allows for a change of regulator at the direction of the Secretary of State or the Welsh Ministers.

**Changes to legislation:** *The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

Regulation 34 requires the regulator periodically to review permits and to inspect regulated facilities. Regulation 35 and Schedules 7 to 25 require the regulator to exercise its functions so as to comply with the duties set out in those Schedules. Each Schedule requires the regulator to ensure compliance with a specified Directive or Directives (where applicable) when exercising its functions in relation to a regulated facility falling within the Schedule's scope.

Part 4 contains enforcement-related provisions. Regulations 36 and 37 provide for enforcement notices (requiring compliance with a permit) and suspension notices (suspending the authorisation of the operation of a regulated facility). Regulation 38 contains offences and regulation 40 provides for defences. Regulation 39 sets the penalties on conviction and provides for enforcement undertakings.

Part 5 make provision for public registers to be kept by the regulator, including information which may be kept off the register in the interests of national security or because it is confidential in nature<sup>8</sup>

Part 6 confers powers on the regulator, Secretary of State and Welsh Ministers and imposes duties on the regulator. This Part includes power for the regulator to prevent or remedy pollution and to recover associated costs from the operator (regulation 57), a requirement on the appropriate agency to publish a public participation statement (regulation 60), and power for the Secretary of State or Welsh Ministers to make schemes setting fees and charges in relation to local authority functions under these Regulations.

Part 7 contains miscellaneous provisions. By virtue of regulation 1(2), the provisions in Schedules 28 and 29 (revocations and consequential amendments) extend to England and Wales only.

Regulation 80 requires the Secretary of State to review the operation and effect of these Regulations before the end of April 2019 and every 5 years thereafter and lay a report before Parliament.

Full impact assessments of the effect that the Environmental Permitting (England and Wales) Regulations 2010 and its amending instruments where appropriate will have on the costs of business and the voluntary sector are available from the Air Quality and Industrial Emissions Team at the Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR or at [www.legislation.gov.uk](http://www.legislation.gov.uk). No separate impact assessment has been produced for this instrument. An updated transposition note is submitted with the Explanatory Memorandum which is available alongside the instrument on [www.legislation.gov.uk](http://www.legislation.gov.uk).

**Changes to legislation:**

The Environmental Permitting (England and Wales) Regulations 2016 is up to date with all changes known to be in force on or before 11 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations.

[View outstanding changes](#)

**Changes and effects yet to be applied to :**

- Sch. 7 para. 5(d) omitted by [S.I. 2019/39 reg. 2\(11\)\(b\)\(i\)](#) (This amendment not applied to legislation.gov.uk. Reg. 2(11)(b)(i) revoked immediately before IP completion day by S.I. 2019/559, regs. 1(2), 3(2)(a))
- Sch. 13 para. 4(1)(d) omitted by [S.I. 2019/39 reg. 2\(17\)\(b\)\(i\)\(aa\)](#) (This amendment not applied to legislation.gov.uk. Reg. 2(17)(b)(i)(aa) revoked immediately before IP completion day by S.I. 2019/559, regs. 1(2), 3(2)(b)(i))
- Sch. 14 para. 3(d) omitted by [S.I. 2019/39 reg. 2\(18\)\(b\)\(i\)](#) (This amendment not applied to legislation.gov.uk. Reg. 2(18)(b)(i) revoked immediately before IP completion day by S.I. 2019/559, regs. 1(2), 3(2)(c))
- reg. 12 excluded by [S.I. 2020/1297 art. 3\(1\)\(f\)](#) (This amendment not applied to legislation.gov.uk. S.I. 2020/1297 was withdrawn following a request from the Department of Transport dated 9th August 2021 which followed the decision of the High Court of Justice to quash this Order in the judgement dated 2nd August 2021 (High Court of Justice — Planning Court — The Queen (on the application of Save Stonehenge World Heritage Site) v. Secretary of State for Transport — Case No. CO/4844/2020))
- reg. 12 excluded by [S.I. 2021/51 art. 3\(f\)](#) (This amendment not applied to legislation.gov.uk. S.I. 2021/51 removed from the website by request from the Department of Transport dated 12th July 2021 which followed the decision of the High Court of Justice to quash these Regulations in the judgement dated 8th July 2021 (High Court of Justice — Planning Court — The Queen (on the application of Mair Bain) v. Secretary of State for Transport — Case No. CO/642/2021).)
- reg. 12 excluded by [S.I. 2024/752 art. 3\(1\)](#)



11 May 2016

RPS  
St Paul's House  
Enterprise Way  
Jubilee Business Park  
Stores Road  
Derby  
DE21 4BB

For the attention of David De Rosa

**Severn Trent Water Limited**  
**Commercial Waste**  
PO Box 51  
Raynesway  
Derby  
DE21 7JA

Tel: 01332 683369  
www.stwater.co.uk

Contact: Shirley Downer-Russell  
Direct line: 07771 938750  
commercial.waste@severntrent.co.uk

Your ref:  
Our ref: 008675V

Dear Sirs

**Water Industry Act 1991 – Trade Effluent Consent**

Please find enclosed your consent to discharge trade effluent.

The Consent contains conditions designed to protect sewers, sewage treatment processes and the people working in these areas. These conditions apply at all times. They are also necessary to ensure that we meet our environmental obligations with regard to the discharge limits from our sewage treatment works set by the Environment Agency and for the safe disposal of sewage sludge without harm to the environment.

A number of appendices are attached to the Consent:

- |                     |   |
|---------------------|---|
| <b>Appendix I</b>   | Lists the quality conditions.   |
| <b>Appendix II</b>  | Gives the requirements for quality and volume measurement and the sampling point. We should also be pleased if you would advise us of any particular health and safety requirements that staff should follow when visiting your premises. |
| <b>Appendix III</b> | Shows how the trade effluent charge is calculated.  |
| <b>Appendix IV</b>  | Explains the nitrification charge calculation.  |
| <b>Appendix V</b>   | Explains offences under the Water Industry Act 1991.  |

You should by now have installed the required metering equipment. If not, this must be done within 1 calendar month of the date of this letter.

Please note your obligations under section 8 of your consent to discharge, to keep records of meter readings and discharge volumes.

Registered in England & Wales  
Registration No. 2366686  
Registered Office:  
Severn Trent Centre,  
2 St John's Street,  
Coventry CV1 2LZ

The chargeable volumes for trade effluent and other used water will be determined as follows:

Trade effluent:  $TE = \text{Site Area (20700 m}^2\text{)} \times \text{Rainfall}$

Other used water:  $OUW = \text{SSW WS Meter}$

It is your responsibility to provide documented evidence to support any claims for allowances or non-returns.

Failure to provide any information or readings used for allowances will result in a 'zero' allowance being applied.

Any allowances agreed will be periodically reviewed to ensure that they still represent the current situation at your premises.

If you have any questions, please do not hesitate to contact me.

Yours faithfully



 Shirley Downer-Russell  
**Commercial Waste Team**



## Consent to the discharge of trade effluent to the public foul water sewer

To: The Company Secretary  
Sims Group UK Limited  
Long Marston  
Stratford Upon Avon  
Warwickshire  
CV37 8AQ

### WHEREAS

On the **1 April 2016** a trade effluent notice was, in pursuance of the provisions of the Water Industry Act 1991, served by you on Severn Trent Water Limited in respect of the premises known as **Sims Group UK Limited** and situated at **Shredder Site, Rabone Lane, Smethwick, West Midlands B66 2LF**.

NOW THEREFORE Severn Trent Water Limited (hereinafter called "The Sewerage Undertaker") HEREBY CONSENT to the discharge of trade effluent from the above-mentioned premises into the public foul water sewers subject to the following conditions and not otherwise.

- Sewer Affected** 1. The public sewer into which the trade effluent may be discharged is the foul water sewer situated in **Foundry Lane**.
- Nature or Composition** 2. The trade effluent to be discharged shall consist solely of waste waters specified in the trade effluent notice served in respect of the premises and derived from **rainfall dependant site runoff only**.
- Maximum volume** 3. The maximum volume of trade effluent to be discharged in any continuous period of 24 hours shall not exceed **60** cubic metres.
- Maximum rate** 4. The highest rate at which the trade effluent may be discharged shall not exceed **10.5** litres per second.
- Period of discharge** 5. The trade effluent shall only be discharged into the public sewer between **00:00** and **23:59** hours.
- Quality Conditions** 6. a. The trade effluent to be discharged shall not contain any of the substances or properties listed in Appendix I in amounts or proportions other than those which comply with the limits there stated and shall not contain any substances or properties not listed in Appendix I except with the prior written permission of the Sewerage Undertaker and on such terms and conditions as are set out therein.
- b. The trade effluent to be discharged shall not contain any special category effluent (as defined in Section 138 of the Water Industry Act 1991) in a concentration greater than background concentration (as defined in the Trade Effluents (Prescribed Processes and Substances) Regulations 1989).
- c. Where the trade effluent derives from a prescribed process mentioned in Schedule 2 to the Trade Effluents (Prescribed Processes and Substances) Regulations 1989, it shall not contain asbestos (as defined in the said Regulations) and chloroform in a concentration greater than the background concentration (as defined in the said Regulations);

**Inspection chamber** 7. An inspection chamber or manhole shall be provided and maintained in connection with each pipe through which the trade effluent is to be discharged into the public sewer, and such inspection chamber or manhole shall be so constructed and maintained as to enable a person to readily obtain samples at any time, of the trade effluent so discharged.

**Quality and volume measurement** 8. a. Apparatus adequate for measuring and automatically recording the volume, rate and composition of trade effluent so discharged shall be provided with every such pipe and such measurement apparatus shall be maintained and tested to the satisfaction of the Sewerage Undertaker.

b. If the measuring and recording apparatus ceases to record or is suspected of not measuring correctly, then the Sewerage Undertaker shall have the right to make estimates of the volume and composition of the trade effluent until such time as the said apparatus is again operating to the satisfaction of the Sewerage Undertaker.

c. The foregoing provisions of this condition shall be of no effect so long as there is provided and maintained to the satisfaction of the Sewerage Undertaker some other method approved by the Sewerage Undertaker of sampling the trade effluent or determining, measuring and recording the volume and composition of the trade effluent so discharged.

d. Records of the volume and composition of the trade effluent discharged into the sewer shall be kept available at all times for inspection by any authorised representative of the Sewerage Undertaker and copies of such records shall be sent to the Sewerage Undertaker on demand.

**Payment** 9. Payment shall be made to the Sewerage Undertaker for the reception, treatment and disposal of the trade effluent discharged into the public foul water sewer in accordance with the Sewerage Undertaker's Charging Scheme in force from time to time.

All sums payable to the Sewerage Undertaker under this condition shall become due and payable on demand.

**Dated the eleventh day of May 2016**  
**For and on behalf of the Sewerage Undertaker**



**G Batty**  
**Regulatory Performance Lead**

**Address of the Sewerage Undertaker**

Severn Trent Water Limited  
Severn Trent Centre  
2 St Johns Street  
Coventry  
CV1 2LZ

NOTE: Your attention is drawn to the right of appeal to OFWAT conferred by Section 126 of the Water Industry Act 1991.

## QUALITY CONDITIONS

1. The total of Suspended Solids in the trade effluent shall not exceed 1000 milligrams per litre.
2. The temperature of the trade effluent shall not exceed 43 degrees C (110 degrees F).
3. The pH value of the trade effluent shall not be less than 6 nor greater than 10 in the recognised scale.
4. The Chemical Oxygen Demand from acidified dichromate (C.O.D.) of the trade effluent shall not exceed 1000 milligrams per litre expressed as O.
5. The total of Iron in the trade effluent shall not exceed 50 milligrams per litre.
6. The total of Aluminium in the trade effluent shall not exceed 50 milligrams per litre.
7. The total of Chromium in the trade effluent shall not exceed 1 milligram per litre.
8. The total of Copper in the trade effluent shall not exceed 3 milligrams per litre.
9. The total of Lead in the trade effluent shall not exceed 4 milligrams per litre.
10. The total of Nickel in the trade effluent shall not exceed 1 milligram per litre.
11. The total of Zinc in the trade effluent shall not exceed 10 milligrams per litre.
12. The total of Tin in the trade effluent shall not exceed 1 milligram per litre.
13. The total of Ammoniacal Nitrogen in the trade effluent shall not exceed 50 milligrams per litre expressed as N.
14. The total of non-volatile matter extractable by light petroleum (40-60 degrees Centigrade petroleum ether) in the trade effluent shall not exceed 25 milligrams per litre.
15. The total of Phosphorus in the trade effluent shall not exceed 25 milligrams per litre expressed as Phosphorus (P).
16. The total of Antimony in the trade effluent shall not exceed 0.1 milligram per litre expressed as Antimony (Sb).
17. The total of Cadmium in the trade effluent shall not exceed 0.05 milligram per litre
18. The trade effluent shall not contain any substance or substances which either alone, or in combination with any matter in any sewers or receiving sewage treatment works vested in and/or under the control of Severn Trent Water Limited, would give rise to obnoxious, poisonous or inflammable gases, or otherwise a statutory nuisance as defined by the Environmental Protection Act 1990 in such sewers or works, would be deleterious to such sewers or to the processes in use at such works or to the disposal of effluents and sludges produced by such works.
19. The trade effluent shall be free from physically separable oil.
20. The trade effluent shall not contain any substance or substances which either alone, or in combination with any matter in any sewers or receiving sewage treatment works vested in and/or under the control of Severn Trent Water Limited, would give rise to obnoxious, poisonous or inflammable gases, or otherwise a statutory nuisance as defined by the Environmental Protection Act 1990 in such sewers or works, would be deleterious to such sewers or to the processes in use at such works or to the disposal of effluents and sludges produced by such works.

A shaken sample is to be used except for C.O.D., where the sample shall be supernatant after 1 hour settlement

**QUALITY AND VOLUME MEASUREMENT****1. Quality measurement**

None required

**1.1 Sampling point**

To enable a representative sample of trade effluent to be taken a suitable sampling point shall be provided to the satisfaction of the Sewerage Undertaker at a point marked SAMPLE POINT as shown on the Plan No. 008675V/00 attached hereto.

The Sample Point is located at the Last manhole after the interceptor.

Safe access to and exit from this point for inspection and monitoring purposes by authorised representatives of the Sewerage Undertaker shall be provided.

**2. Volume measurement**

The volume of trade effluent discharged to the foul water sewer will be calculated from the area of the site draining to the foul water sewer ( $m^2$ ) multiplied by rainfall (mm/1000). (Area of the site draining to the foul water sewer 20,700 $m^2$ )

**Sims Group UK Limited  
Shredder Site  
Rabone Lane  
Smethwick  
West Midlands  
B66 2LF**

**Sample Point Location:  
last manhole after the  
interceptor.**

**Sample Point No:  
09979520**

**Plan No: 008675V/00**

Ordnance Survey licence number 100018202

## TRADE EFFLUENT CHARGE CALCULATION

The payment to be made by the occupier of the premises from which the trade effluent is discharged for the whole or any part of any period of twelve calendar months commencing on 1 April in any year shall be calculated as follows:

1. The volume of trade effluent discharged in cubic metres multiplied by C, where

$$C = R + V + \frac{O_t}{O_s} \times B + \frac{S_t}{S_s} \times S$$

**C** = Total charge per cubic metre of trade effluent.

**R** = One third of the amount determined by the Sewerage Undertaker as the average cost to the Sewerage Undertaker for the year of charge of receiving into its sewers (other than those used solely for surface water) and conveying one cubic metre of sewage to the Sewerage Undertaker's sewage treatment works.

**V** = The amount determined by the Sewerage Undertaker as the average cost for the year of charge of primary treatment and other volumetric treatment costs in the treatment of one cubic metre of sewage at the Sewerage Undertaker's sewage treatment works.

**O<sub>t</sub>** = The Chemical Oxygen Demand (COD) of the trade effluent in milligrams per litre (mg/l) after one hour quiescent settlement.

**O<sub>s</sub>** = The estimated average Chemical Oxygen Demand (COD) of settled sewage in milligrams per litre (mg/l) at the Sewerage Undertaker's works as determined by the Sewerage Undertaker for the purposes of the year of charge.

**B** = The amount determined by the Sewerage Undertaker as the average cost to the Sewerage Undertaker for the year of charge of biological treatment of one cubic metre of sewage at the Sewerage Undertaker's sewage treatment works.

**S<sub>t</sub>** = The total suspended solids in the trade effluent in milligrams per litre (mg/l) at the pH of the trade effluent.

**S<sub>s</sub>** = The estimated average amount of suspended solids in milligrams per litre (mg/l) determined on a shaken sample, in sewage received for treatment at the Sewerage Undertaker's works as determined by the Sewerage Undertaker for the purposes of the year of charge.

**S** = The amount determined by the Sewerage Undertaker as the average cost to the Sewerage Undertaker for the year of charge, of primary sludge treatment and disposal of one cubic metre of sewage at the Sewerage Undertaker's sewage treatment works.

2. Minimum charge for small volumes:

Where the product of the volume of trade effluent in cubic metres and the unit charge calculated from the above formula is less than the minimum charge determined by the Sewerage Undertaker for the year of charge, then that minimum charge shall be paid.

3. The Sewerage Undertaker will notify the occupier of the premises from which trade effluent is discharged of the factors in the above formula, on which the Sewerage Undertaker's trade effluent charges will be based for each year of charge, prior to 1 April in any year.

## NITRIFICATION CHARGE CALCULATION

This is for effluents controlled by a consent where the average ammonia concentration is greater than 5% of the average settled COD concentration.

Where the average ammonia concentration exceeds 5% of the average settled COD concentration, a revised Chargeable COD value ( $O_t$ ) will be used in the standard trade effluent charge calculation (Appendix III). This revised  $O_t$  value will be calculated as follows:

$$\text{Chargeable COD } (O_t) = \text{average COD} + 4.57(\text{Nt} - 5\% \text{ average COD})$$

**Nt** = The average total ammoniacal nitrogen concentration in milligrams per litre (mg/l) of the trade effluent determined on a sample or samples, expressed as Nitrogen



## APPENDIX V

### OFFENCES

#### Water Industry Act 1991

Your attention is drawn to the provisions of the following Sections:-

Section 121 of the Water Industry Act 1991, which provides interalia that the occupier of the premises from which trade effluent is discharged in contravention of any condition imposed on a consent shall be guilty of an offence and be liable on summary conviction to a fine not exceeding the statutory maximum or on conviction on indictment, to a fine.

Section 111 of the Water Industry Act 1991, the effect of which is given here below, in relation to a discharge of trade effluent which may not comply with either the description stated by the occupier in the trade effluent notice or with any condition in a consent or direction issued under the Act:-

1. No person shall throw, empty or turn, or suffer or permit to be thrown or emptied or to pass, into any public sewer, or into any drain or sewer communicating with a public sewer:
  - (a) Any matter likely to injure the sewer or drain, or to interfere with the free flow of its contents, or to affect prejudicially the treatment and disposal of its contents; or
  - (b) Any chemical refuse or waste steam, or any liquid of a temperature higher than one hundred and ten degrees Fahrenheit, being refuse or steam which, or a liquid which when so heated, is, either alone or in combination with the contents of the sewer or drain, dangerous, or the cause of a nuisance, or prejudicial to health; or
  - (c) Any petroleum spirit, or carbide of calcium.
2. A person who contravenes any of the provisions of this Section shall be liable:
  - (a) On summary conviction to a fine not exceeding the Statutory maximum and to a further fine not exceeding £50 for each day on which the offence continues after conviction;
  - (b) On conviction on indictment, to imprisonment for a term not exceeding two years or a fine or both.
3. In respect of the imposition of a daily penalty;
  - (a) the Court may fix a reasonable date from the date of conviction for compliance with any directions given by the Court; and
  - (b) where a Court has fixed such a period, the daily penalty shall not be imposed in respect of any day before the end of that period.
4. In this section the expression "petroleum spirit" means any such:
  - (a) Crude petroleum
  - (b) Oil made from petroleum, or from coal, shale, peat or other bituminous substances; or
  - (c) Product of petroleum or mixture containing petroleum, as, when tested in the manner prescribed by or under the Petroleum (Consolidation) Act, 1928, gives off an inflammable vapour at a temperature of less than seventy three degrees Fahrenheit.

# DECISIONS

## COMMISSION IMPLEMENTING DECISION (EU) 2018/1147

of 10 August 2018

**establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council**

(notified under document C(2018) 5070)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) <sup>(1)</sup>, and in particular Article 13(5) thereof,

Whereas:

- (1) Best available techniques (BAT) conclusions are the reference for setting permit conditions for installations covered by Chapter II of Directive 2010/75/EU and competent authorities should set emission limit values which ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the BAT conclusions.
- (2) The forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection, established by Commission Decision of 16 May 2011 <sup>(2)</sup>, provided the Commission on 19 December 2017 with its opinion on the proposed content of the BAT reference document for waste treatment. That opinion is publicly available.
- (3) The BAT conclusions set out in the Annex to this Decision are the key element of that BAT reference document.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

### *Article 1*

The best available techniques (BAT) conclusions for waste treatment, as set out in the Annex, are adopted.

### *Article 2*

This Decision is addressed to the Member States.

Done at Brussels, 10 August 2018.

*For the Commission*

Karmenu VELLA

*Member of the Commission*

<sup>(1)</sup> OJ L 334, 17.12.2010, p. 17.

<sup>(2)</sup> Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions (OJ C 146, 17.5.2011, p. 3).

## ANNEX

**BEST AVAILABLE TECHNIQUES (BAT) CONCLUSIONS FOR WASTE**

## SCOPE

These BAT conclusions concern the following activities specified in Annex I to Directive 2010/75/EU, namely:

- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:
  - (a) biological treatment;
  - (b) physico-chemical treatment;
  - (c) blending or mixing prior to submission to any of the other activities listed in points 5.1 and 5.2 of Annex I to Directive 2010/75/EU;
  - (d) repackaging prior to submission to any of the other activities listed in points 5.1 and 5.2 of Annex I to Directive 2010/75/EU;
  - (e) solvent reclamation/regeneration;
  - (f) recycling/reclamation of inorganic materials other than metals or metal compounds;
  - (g) regeneration of acids or bases;
  - (h) recovery of components used for pollution abatement;
  - (i) recovery of components from catalysts;
  - (j) oil re-refining or other reuses of oil;
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC <sup>(1)</sup>:
  - (i) biological treatment;
  - (ii) physico-chemical treatment;
  - (iii) pre-treatment of waste for incineration or co-incineration;
  - (iv) treatment of ashes;
  - (v) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.
- (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC:
  - (i) biological treatment;
  - (ii) pre-treatment of waste for incineration or co-incineration;
  - (iii) treatment of ashes;
  - (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

- 5.5. Temporary storage of hazardous waste not covered under point 5.4 of Annex I to Directive 2010/75/EU pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 of Annex I to Directive 2010/75/EU with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated.
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation undertaking activities covered under points 5.1, 5.3 or 5.5 as listed above.

<sup>(1)</sup> Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40).

Referring to independently operated treatment of waste water not covered by Directive 91/271/EEC above, these BAT conclusions also cover the combined treatment of waste water from different origins if the main pollutant load originates from the activities covered under points 5.1, 5.3 or 5.5 as listed above.

These BAT conclusions do not address the following:

- Surface impoundment.
- Disposal or recycling of animal carcasses or of animal waste covered by the activity description in point 6.5 of Annex I to Directive 2010/75/EU when this is covered by the BAT conclusions on the slaughterhouses and animal by-products industries (SA).
- On-farm processing of manure when this is covered by the BAT conclusions for the intensive rearing of poultry or pigs (IRPP).
- Direct recovery (i.e. without pretreatment) of waste as a substitute for raw materials in installations carrying out activities covered by other BAT conclusions, e.g.:
  - Direct recovery of lead (e.g. from batteries), zinc or aluminium salts or recovery of the metals from catalysts. This may be covered by the BAT conclusions for the non-ferrous metals industries (NFM).
  - Processing of paper for recycling. This may be covered by the BAT conclusions for the production of pulp, paper and board (PP).
  - Use of waste as fuel/raw material in cement kilns. This may be covered by the BAT conclusions for the production of cement, lime and magnesium oxide (CLM).
- Waste (co-)incineration, pyrolysis and gasification. This may be covered by the BAT conclusions for waste incineration (WI) or the BAT conclusions for large combustion plants (LCP).
- Landfill of waste. This is covered by Council Directive 1999/31/EC<sup>(1)</sup>. In particular, underground permanent and long-term storage ( $\geq 1$  year before disposal,  $\geq 3$  years before recovery) are covered by Directive 1999/31/EC.
- *In situ* remediation of contaminated soil (i.e. unexcavated soil).
- Treatment of slags and bottom ashes. This may be covered by the BAT conclusions for waste incineration (WI) and/or the BAT conclusions for large combustion plants (LCP).
- Smelting of scrap metals and metal-bearing materials. This may be covered by the BAT conclusions for non-ferrous metals industries (NFM), the BAT conclusions for iron and steel production (IS), and/or the BAT conclusions for the smitheries and foundries industry (SF).
- Regeneration of spent acids and alkalis when this is covered by the BAT conclusions for ferrous metals processing.
- Combustion of fuels when it does not generate hot gases which come into direct contact with the waste. This may be covered by the BAT conclusions for large combustion plants (LCP) or by Directive (EU) 2015/2193 of the European Parliament and of the Council<sup>(2)</sup>.

Other BAT conclusions and reference documents which could be relevant for the activities covered by these BAT conclusions are the following:

- Economics and cross-media effects (ECM);
- Emissions from storage (EFS);
- Energy efficiency (ENE);
- Monitoring of emissions to air and water from IED installations (ROM);
- Production of cement, lime and magnesium oxide (CLM);
- Common waste water and waste gas treatment/management systems in the chemical sector (CWW);
- Intensive rearing of poultry or pigs (IRPP).

These BAT conclusions apply without prejudice to the relevant provisions of EU legislation, e.g. the waste hierarchy.

<sup>(1)</sup> Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1).

<sup>(2)</sup> Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1).

## DEFINITIONS

For the purposes of these BAT conclusions, the following **definitions** apply:

Term used	Definition
<b>General terms</b>	
Channelled emissions	Emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open-top biofilters.
Continuous measurement	Measurement using an 'automated measuring system' permanently installed on site.
Declaration of cleanliness	Written document provided by the waste producer/holder certifying that the empty waste packaging concerned (e.g. drums, containers) is clean with respect to the acceptance criteria.
Diffuse emissions	Non-channelled emissions (e.g. of dust, organic compounds, odour) which can result from 'area' sources (e.g. tanks) or 'point' sources (e.g. pipe flanges). This also includes emissions from open-air windrow composting.
Direct discharge	Discharge to a receiving water body without further downstream waste water treatment.
Emissions factors	Numbers that can be multiplied by known data such as plant/process data or throughput data to estimate emissions.
Existing plant	A plant that is not a new plant.
Flaring	High-temperature oxidation to burn combustible compounds of waste gases from industrial operations with an open flame. Flaring is primarily used for burning off flammable gas for safety reasons or during non-routine operating conditions.
Fly ashes	Particles from the combustion chamber or formed within the flue-gas stream, that are transported in the flue-gas.
Fugitive emissions	Diffuse emissions from 'point' sources.
Hazardous waste	Hazardous waste as defined in point 2 of Article 3 of Directive 2008/98/EC.
Indirect discharge	Discharge which is not a direct discharge.
Liquid biodegradable waste	Waste of biological origin with a relatively high water content (e.g. fat separator contents, organic sludges, catering waste).
Major plant upgrade	A major change in the design or technology of a plant with major adjustments or replacements of the process and/or abatement technique(s) and associated equipment.
Mechanical biological treatment (MBT)	Treatment of mixed solid waste combining mechanical treatment with biological treatment such as aerobic or anaerobic treatment.
New plant	A plant first permitted at the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant following the publication of these BAT conclusions.
Output	The treated waste exiting the waste treatment plant.

Term used	Definition
Pasty waste	Sludge which is not free-flowing.
Periodic measurement	Measurement at specified time intervals using manual or automated methods.
Recovery	Recovery as defined in Article 3(15) of Directive 2008/98/EC.
Re-refining	Treatments carried out on waste oil to transform it to base oil.
Regeneration	Treatments and processes mainly designed to make the treated materials (e.g. spent activated carbon or spent solvent) suitable again for a similar use.
Sensitive receptor	Area which needs special protection, such as: <ul style="list-style-type: none"> <li>— residential areas;</li> <li>— areas where human activities are carried out (e.g. neighbouring workplaces, schools, daycare centres, recreational areas, hospitals or nursing homes).</li> </ul>
Surface impoundment	Placement of liquid or sludgy discards into pits, ponds, lagoons, etc.
Treatment of waste with calorific value	Treatment of waste wood, waste oil, waste plastics, waste solvents, etc. to obtain a fuel or to allow a better recovery of its calorific value.
VFCs	Volatile (hydro)fluorocarbons: VOCs consisting of fluorinated (hydro)carbons, in particular chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs).
VHCs	Volatile hydrocarbons: VOCs consisting entirely of hydrogen and carbon (e.g. ethane, propane, iso-butane, cyclopentane).
VOC	Volatile organic compound as defined in Article 3(45) of Directive 2010/75/EU.
Waste holder	Waste holder as defined in Article 3(6) of Directive 2008/98/EC of the European Parliament and of the Council (1).
Waste input	The incoming waste to be treated in the waste treatment plant.
Water-based liquid waste	Waste consisting of aqueous liquids, acids/alkalis or pumpable sludges (e.g. emulsions, waste acids, aqueous marine waste) which is not liquid biodegradable waste.

#### Pollutants/parameters

AOX	Adsorbable organically bound halogens, expressed as Cl, include adsorbable organically bound chlorine, bromine and iodine.
Arsenic	Arsenic, expressed as As, includes all inorganic and organic arsenic compounds, dissolved or bound to particles.
BOD	Biochemical oxygen demand. Amount of oxygen needed for the biochemical oxidation of organic and/or inorganic matter in five (BOD <sub>5</sub> ) or in seven (BOD <sub>7</sub> ) days.
Cadmium	Cadmium, expressed as Cd, includes all inorganic and organic cadmium compounds, dissolved or bound to particles.

Term used	Definition
CFCs	Chlorofluorocarbons: VOCs consisting of carbon, chlorine and fluorine.
Chromium	Chromium, expressed as Cr, includes all inorganic and organic chromium compounds, dissolved or bound to particles.
Hexavalent chromium	Hexavalent chromium, expressed as Cr(VI), includes all chromium compounds where the chromium is in the oxidation state +6.
COD	Chemical oxygen demand. Amount of oxygen needed for the total chemical oxidation of the organic matter to carbon dioxide. COD is an indicator for the mass concentration of organic compounds.
Copper	Copper, expressed as Cu, includes all inorganic and organic copper compounds, dissolved or bound to particles.
Cyanide	Free cyanide, expressed as CN <sup>-</sup> .
Dust	Total particulate matter (in air).
HOI	Hydrocarbon oil index. The sum of compounds extractable with a hydrocarbon solvent (including long-chain or branched aliphatic, alicyclic, aromatic or alkyl-substituted aromatic hydrocarbons).
HCl	All inorganic gaseous chlorine compounds, expressed as HCl.
HF	All inorganic gaseous fluorine compounds, expressed as HF.
H <sub>2</sub> S	Hydrogen sulphide. Carbonyl sulphide and mercaptans are not included.
Lead	Lead, expressed as Pb, includes all inorganic and organic lead compounds, dissolved or bound to particles.
Mercury	Mercury, expressed as Hg, includes elementary mercury and all inorganic and organic mercury compounds, gaseous, dissolved or bound to particles.
NH <sub>3</sub>	Ammonia.
Nickel	Nickel, expressed as Ni, includes all inorganic and organic nickel compounds, dissolved or bound to particles.
Odour concentration	Number of European Odour Units (ou <sub>E</sub> ) in one cubic metre at standard conditions measured by dynamic olfactometry according to EN 13725.
PCB	Polychlorinated biphenyl.
Dioxin-like PCBs	Polychlorinated biphenyls as listed in Commission Regulation (EC) No 199/2006 <sup>(2)</sup> .
PCDD/F	Polychlorinated dibenzo- <i>p</i> -dioxin/furan(s).
PFOA	Perfluorooctanoic acid.
PFOS	Perfluorooctanesulphonic acid.
Phenol index	The sum of phenolic compounds, expressed as phenol concentration and measured according to EN ISO 14402.

Term used	Definition
TOC	Total organic carbon, expressed as C (in water), includes all organic compounds.
Total N	Total nitrogen, expressed as N, includes free ammonia and ammonium nitrogen (NH <sub>4</sub> -N), nitrite nitrogen (NO <sub>2</sub> -N), nitrate nitrogen (NO <sub>3</sub> -N) and organically bound nitrogen.
Total P	Total phosphorus, expressed as P, includes all inorganic and organic phosphorus compounds, dissolved or bound to particles
TSS	Total suspended solids. Mass concentration of all suspended solids (in water), measured via filtration through glass fibre filters and gravimetry.
TVOC	Total volatile organic carbon, expressed as C (in air).
Zinc	Zinc, expressed as Zn, includes all inorganic and organic zinc compounds, dissolved or bound to particles.

(<sup>1</sup>) Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

(<sup>2</sup>) Commission Regulation (EC) No 199/2006 of 3 February 2006 amending Regulation (EC) No 466/2001 setting maximum levels for certain contaminants in foodstuffs as regards dioxins and dioxin-like PCBs (OJ L 32, 4.2.2006, p. 34).

For the purposes of these BAT conclusions, the following **acronyms** apply:

Acronym	Definition
EMS	Environmental management system
EoLVs	End-of-life vehicles (as defined in Article 2(2) of Directive 2000/53/EC of the European Parliament and of the Council ( <sup>1</sup> ))
HEPA	High-efficiency particle air (filter)
IBC	Intermediate bulk container
LDAR	Leak detection and repair
LEV	Local exhaust ventilation system
POP	Persistent organic pollutant (as listed in Regulation (EC) No 850/2004 of the European Parliament and of the Council ( <sup>2</sup> ))
WEEE	Waste electrical and electronic equipment (as defined in Article 3(1) of Directive 2012/19/EU of the European Parliament and of the Council ( <sup>3</sup> ))

(<sup>1</sup>) Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles (OJ L 269, 21.10.2000, p. 34).

(<sup>2</sup>) Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC (OJ L 158, 30.4.2004, p. 7).

(<sup>3</sup>) Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).

## GENERAL CONSIDERATIONS

### Best Available Techniques

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

Unless otherwise stated, the BAT conclusions are generally applicable.



### Emission levels associated with the best available techniques (BAT-AELs) for emissions to air

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for emissions to air given in these BAT conclusions refer to concentrations (mass of emitted substances per volume of waste gas) under the following standard conditions: dry gas at a temperature of 273,15 K and a pressure of 101,3 kPa, without correction for oxygen content, and expressed in  $\mu\text{g}/\text{Nm}^3$  or  $\text{mg}/\text{Nm}^3$ .

For averaging periods of BAT-AELs for emissions to air, the following **definitions** apply.

Type of measurement	Averaging period	Definition
Continuous	Daily average	Average over a period of one day based on valid hourly or half-hourly averages.
Periodic	Average over the sampling period	Average value of three consecutive measurements of at least 30 minutes each <sup>(1)</sup> .

<sup>(1)</sup> For any parameter where, due to sampling or analytical limitations, a 30-minute measurement is inappropriate, a more suitable measurement period may be employed (e.g. for the odour concentration). For PCDD/F or dioxin-like PCBs, one sampling period of 6 to 8 hours is used.

Where continuous measurement is used, the BAT-AELs may be expressed as daily averages.

### Emission levels associated with the best available techniques (BAT-AELs) for emissions to water

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for emissions to water given in these BAT conclusions refer to concentrations (mass of emitted substances per volume of water), expressed in  $\mu\text{g}/\text{l}$  or  $\text{mg}/\text{l}$ .

Unless stated otherwise, averaging periods associated with the BAT-AELs refer to either of the following two cases:

- in the case of continuous discharge, daily average values, i.e. 24-hour flow-proportional composite samples;
- in the case of batch discharge, average values over the release duration taken as flow-proportional composite samples, or, provided that the effluent is appropriately mixed and homogeneous, a spot sample taken before discharge.

Time-proportional composite samples can be used provided that sufficient flow stability is demonstrated.

All BAT-AELs for emissions to water apply at the point where the emission leaves the installation.

### Abatement efficiency

The calculation of the average abatement efficiency referred to in these BAT conclusions (see Table 6.1) does not include, for COD and TOC, initial treatment steps aiming at separating the bulk organic content from the water-based liquid waste, such as evapo-condensation, emulsion breaking or phase separation.

#### 1. GENERAL BAT CONCLUSIONS

##### 1.1. Overall environmental performance

**BAT 1.** In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

- I. commitment of the management, including senior management;
- II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;

- III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- IV. implementation of procedures paying particular attention to:
  - (a) structure and responsibility,
  - (b) recruitment, training, awareness and competence,
  - (c) communication,
  - (d) employee involvement,
  - (e) documentation,
  - (f) effective process control,
  - (g) maintenance programmes,
  - (h) emergency preparedness and response,
  - (i) safeguarding compliance with environmental legislation;
- V. checking performance and taking corrective action, paying particular attention to:
  - (a) monitoring and measurement (see also the JRC Reference Report on Monitoring of emissions to air and water from IED installations – ROM),
  - (b) corrective and preventive action,
  - (c) maintenance of records,
  - (d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- VII. following the development of cleaner technologies;
- VIII. consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- IX. application of sectoral benchmarking on a regular basis;
- X. waste stream management (see BAT 2);
- XI. an inventory of waste water and waste gas streams (see BAT 3);
- XII. residues management plan (see description in Section 6.5);
- XIII. accident management plan (see description in Section 6.5);
- XIV. odour management plan (see BAT 12);
- XV. noise and vibration management plan (see BAT 17).

#### *Applicability*

The scope (e.g. level of detail) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have (determined also by the type and amount of wastes processed).

**BAT 2.** In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below.

	Technique	Description
a.	Set up and implement waste characterisation and pre-acceptance procedures	These procedures aim to ensure the technical (and legal) suitability of waste treatment operations for a particular waste prior to the arrival of the waste at the plant. They include procedures to collect information about the waste input and may include waste sampling and characterisation to achieve sufficient knowledge of the waste composition. Waste pre-acceptance procedures are risk-based considering, for example, the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).
b.	Set up and implement waste acceptance procedures	Acceptance procedures aim to confirm the characteristics of the waste, as identified in the pre-acceptance stage. These procedures define the elements to be verified upon the arrival of the waste at the plant as well as the waste acceptance and rejection criteria. They may include waste sampling, inspection and analysis. Waste acceptance procedures are risk-based considering, for example, the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).
c.	Set up and implement a waste tracking system and inventory	A waste tracking system and inventory aim to track the location and quantity of waste in the plant. It holds all the information generated during waste pre-acceptance procedures (e.g. date of arrival at the plant and unique reference number of the waste, information on the previous waste holder(s), pre-acceptance and acceptance analysis results, intended treatment route, nature and quantity of the waste held on site including all identified hazards), acceptance, storage, treatment and/or transfer off site. The waste tracking system is risk-based considering, for example, the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).
d.	Set up and implement an output quality management system	This technique involves setting up and implementing an output quality management system, so as to ensure that the output of the waste treatment is in line with the expectations, using for example existing EN standards. This management system also allows the performance of the waste treatment to be monitored and optimised, and for this purpose may include a material flow analysis of relevant components throughout the waste treatment. The use of a material flow analysis is risk-based considering, for example, the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).
e.	Ensure waste segregation	Waste is kept separated depending on its properties in order to enable easier and environmentally safer storage and treatment. Waste segregation relies on the physical separation of waste and on procedures that identify when and where wastes are stored.

	Technique	Description
f.	Ensure waste compatibility prior to mixing or blending of waste	Compatibility is ensured by a set of verification measures and tests in order to detect any unwanted and/or potentially dangerous chemical reactions between wastes (e.g. polymerisation, gas evolution, exothermic reaction, decomposition, crystallisation, precipitation) when mixing, blending or carrying out other treatment operations. The compatibility tests are risk-based considering, for example, the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).
g.	Sort incoming solid waste	Sorting of incoming solid waste <sup>(1)</sup> aims to prevent unwanted material from entering subsequent waste treatment process(es). It may include: <ul style="list-style-type: none"> <li>— manual separation by means of visual examinations;</li> <li>— ferrous metals, non-ferrous metals or all-metals separation;</li> <li>— optical separation, e.g. by near-infrared spectroscopy or X-ray systems;</li> <li>— density separation, e.g. by air classification, sink-float tanks, vibration tables;</li> <li>— size separation by screening/sieving.</li> </ul>

<sup>(1)</sup> Sorting techniques are described in Section 6.4

**BAT 3.** In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:

- (i) information about the characteristics of the waste to be treated and the waste treatment processes, including:
  - (a) simplified process flow sheets that show the origin of the emissions;
  - (b) descriptions of process-integrated techniques and waste water/waste gas treatment at source including their performances;
- (ii) information about the characteristics of the waste water streams, such as:
  - (a) average values and variability of flow, pH, temperature, and conductivity;
  - (b) average concentration and load values of relevant substances and their variability (e.g. COD/TOC, nitrogen species, phosphorus, metals, priority substances/micropollutants);
  - (c) data on bioeliminability (e.g. BOD, BOD to COD ratio, Zahn-Wellens test, biological inhibition potential (e.g. inhibition of activated sludge)) (see BAT 52);
- (iii) information about the characteristics of the waste gas streams, such as:
  - (a) average values and variability of flow and temperature;
  - (b) average concentration and load values of relevant substances and their variability (e.g. organic compounds, POPs such as PCBs);
  - (c) flammability, lower and higher explosive limits, reactivity;
  - (d) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, nitrogen, water vapour, dust).

#### *Applicability*

The scope (e.g. level of detail) and nature of the inventory will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have (determined also by the type and amount of wastes processed).

**BAT 4.** In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.

Technique		Description	Applicability
a.	Optimised storage location	<p>This includes techniques such as:</p> <ul style="list-style-type: none"> <li>— the storage is located as far as technically and economically possible from sensitive receptors, watercourses, etc.;</li> <li>— the storage is located in such a way so as to eliminate or minimise the unnecessary handling of wastes within the plant (e.g. the same wastes are handled twice or more or the transport distances on site are unnecessarily long).</li> </ul>	Generally applicable to new plants.
b.	Adequate storage capacity	<p>Measures are taken to avoid accumulation of waste, such as:</p> <ul style="list-style-type: none"> <li>— the maximum waste storage capacity is clearly established and not exceeded taking into account the characteristics of the wastes (e.g. regarding the risk of fire) and the treatment capacity;</li> <li>— the quantity of waste stored is regularly monitored against the maximum allowed storage capacity;</li> <li>— the maximum residence time of waste is clearly established.</li> </ul>	
c.	Safe storage operation	<p>This includes measures such as:</p> <ul style="list-style-type: none"> <li>— equipment used for loading, unloading and storing waste is clearly documented and labelled;</li> <li>— wastes known to be sensitive to heat, light, air, water, etc. are protected from such ambient conditions;</li> <li>— containers and drums are fit for purpose and stored securely.</li> </ul>	Generally applicable.
d.	Separate area for storage and handling of packaged hazardous waste	When relevant, a dedicated area is used for storage and handling of packaged hazardous waste.	

**BAT 5.** In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.

#### *Description*

Handling and transfer procedures aim to ensure that wastes are safely handled and transferred to the respective storage or treatment. They include the following elements:

- handling and transfer of waste are carried out by competent staff;
- handling and transfer of waste are duly documented, validated prior to execution and verified after execution;

- measures are taken to prevent, detect and mitigate spills;
- operation and design precautions are taken when mixing or blending wastes (e.g. vacuuming dusty/powdery wastes).

Handling and transfer procedures are risk-based considering the likelihood of accidents and incidents and their environmental impact.

## 1.2. Monitoring

**BAT 6.** For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), BAT is to monitor key process parameters (e.g. waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g. at the inlet and/or outlet of the pretreatment, at the inlet to the final treatment, at the point where the emission leaves the installation).

**BAT 7.** BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance/parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup> <sup>(2)</sup>	Monitoring associated with
Adsorbable organically bound halogens (AOX) <sup>(3)</sup> <sup>(4)</sup>	EN ISO 9562	Treatment of water-based liquid waste	Once every day	BAT 20
Benzene, toluene, ethylbenzene, xylene (BTEX) <sup>(3)</sup> <sup>(4)</sup>	EN ISO 15680	Treatment of water-based liquid waste	Once every month	
Chemical oxygen demand (COD) <sup>(5)</sup> <sup>(6)</sup>	No EN standard available	All waste treatments except treatment of water-based liquid waste	Once every month	
		Treatment of water-based liquid waste	Once every day	
Free cyanide (CN <sup>-</sup> ) <sup>(3)</sup> <sup>(4)</sup>	Various EN standards available (i.e. EN ISO 14403-1 and -2)	Treatment of water-based liquid waste	Once every day	
Hydrocarbon oil index (HOI) <sup>(4)</sup>	EN ISO 9377-2	Mechanical treatment in shredders of metal waste	Once every month	
		Treatment of WEEE containing VFCs and/or VHCs		
		Re-refining of waste oil		
		Physico-chemical treatment of waste with calorific value		
		Water washing of excavated contaminated soil	Once every day	
Treatment of water-based liquid waste				

Substance/parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup> <sup>(2)</sup>	Monitoring associated with
Arsenic (As), Cadmium (Cd), Chromium (Cr), Copper (Cu), Nickel (Ni), Lead (Pb), Zinc (Zn) <sup>(3)</sup> <sup>(4)</sup>	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15586)	Mechanical treatment in shredders of metal waste	Once every month	
		Treatment of WEEE containing VFCs and/or VHCs		
		Mechanical biological treatment of waste		
		Re-refining of waste oil		
		Physico-chemical treatment of waste with calorific value		
		Physico-chemical treatment of solid and/or pasty waste		
		Regeneration of spent solvents		
		Water washing of excavated contaminated soil		
		Treatment of water-based liquid waste	Once every day	
Manganese (Mn) <sup>(3)</sup> <sup>(4)</sup>		Treatment of water-based liquid waste	Once every day	
Hexavalent chromium (Cr(VI)) <sup>(3)</sup> <sup>(4)</sup>	Various EN standards available (i.e. EN ISO 10304-3, EN ISO 23913)	Treatment of water-based liquid waste	Once every day	
Mercury (Hg) <sup>(3)</sup> <sup>(4)</sup>	Various EN standards available (i.e. EN ISO 17852, EN ISO 12846)	Mechanical treatment in shredders of metal waste	Once every month	
		Treatment of WEEE containing VFCs and/or VHCs		
		Mechanical biological treatment of waste		
		Re-refining of waste oil		
		Physico-chemical treatment of waste with calorific value		
		Physico-chemical treatment of solid and/or pasty waste		
		Regeneration of spent solvents		
		Water washing of excavated contaminated soil		
		Treatment of water-based liquid waste	Once every day	

Substance/parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup> <sup>(2)</sup>	Monitoring associated with
PFOA <sup>(3)</sup>	No EN standard available	All waste treatments	Once every six months	
PFOS <sup>(3)</sup>				
Phenol index <sup>(6)</sup>	EN ISO 14402	Re-refining of waste oil	Once every month	
		Physico-chemical treatment of waste with calorific value		
		Treatment of water-based liquid waste	Once every day	
Total nitrogen (Total N) <sup>(6)</sup>	EN 12260, EN ISO 11905-1	Biological treatment of waste	Once every month	
		Re-refining of waste oil		
		Treatment of water-based liquid waste	Once every day	
Total organic carbon (TOC) <sup>(3)</sup> <sup>(6)</sup>	EN 1484	All waste treatments except treatment of water-based liquid waste	Once every month	
		Treatment of water-based liquid waste	Once every day	
Total phosphorus (Total P) <sup>(6)</sup>	Various EN standards available (i.e. EN ISO 15681-1 and -2, EN ISO 6878, EN ISO 11885)	Biological treatment of waste	Once every month	
		Treatment of water-based liquid waste	Once every day	
Total suspended solids (TSS) <sup>(6)</sup>	EN 872	All waste treatments except treatment of water-based liquid waste	Once every month	
		Treatment of water-based liquid waste	Once every day	

<sup>(1)</sup> Monitoring frequencies may be reduced if the emission levels are proven to be sufficiently stable.

<sup>(2)</sup> In the case of batch discharge less frequent than the minimum monitoring frequency, monitoring is carried out once per batch.

<sup>(3)</sup> The monitoring only applies when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3.

<sup>(4)</sup> In the case of an indirect discharge to a receiving water body, the monitoring frequency may be reduced if the downstream waste water treatment plant abates the pollutants concerned.

<sup>(5)</sup> Either TOC or COD is monitored. TOC is the preferred option, because its monitoring does not rely on the use of very toxic compounds.

<sup>(6)</sup> The monitoring applies only in the case of a direct discharge to a receiving water body.

**BAT 8.** BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance/Parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup>	Monitoring associated with
Brominated flame retardants <sup>(2)</sup>	No EN standard available	Mechanical treatment in shredders of metal waste	Once every year	BAT 25



Substance/Parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup>	Monitoring associated with
CFCs	No EN standard available	Treatment of WEEE containing VFCs and/or VHCs	Once every six months	BAT 29
Dioxin-like PCBs	EN 1948-1, -2, and -4 <sup>(3)</sup>	Mechanical treatment in shredders of metal waste <sup>(2)</sup>	Once every year	BAT 25
		Decontamination of equipment containing PCBs	Once every three months	BAT 51
Dust	EN 13284-1	Mechanical treatment of waste	Once every six months	BAT 25
		Mechanical biological treatment of waste		BAT 34
		Physico-chemical treatment of solid and/or pasty waste		BAT 41
		Thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil		BAT 49
		Water washing of excavated contaminated soil		BAT 50
HCl	EN 1911	Thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil <sup>(2)</sup>	Once every six months	BAT 49
		Treatment of water-based liquid waste <sup>(2)</sup>		BAT 53
HF	No EN standard available	Thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil <sup>(2)</sup>	Once every six months	BAT 49
Hg	EN 13211	Treatment of WEEE containing mercury	Once every three months	BAT 32
H <sub>2</sub> S	No EN standard available	Biological treatment of waste <sup>(4)</sup>	Once every six months	BAT 34
Metals and metalloids except mercury (e.g. As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V) <sup>(2)</sup>	EN 14385	Mechanical treatment in shredders of metal waste	Once every year	BAT 25
NH <sub>3</sub>	No EN standard available	Biological treatment of waste <sup>(4)</sup>	Once every six months	BAT 34
		Physico-chemical treatment of solid and/or pasty waste <sup>(2)</sup>	Once every six months	BAT 41
		Treatment of water-based liquid waste <sup>(2)</sup>		BAT 53

Substance/Parameter	Standard(s)	Waste treatment process	Minimum monitoring frequency <sup>(1)</sup>	Monitoring associated with
Odour concentration	EN 13725	Biological treatment of waste <sup>(5)</sup>	Once every six months	BAT 34
PCDD/F <sup>(2)</sup>	EN 1948-1, -2 and -3 <sup>(3)</sup>	Mechanical treatment in shredders of metal waste	Once every year	BAT 25
TVOC	EN 12619	Mechanical treatment in shredders of metal waste	Once every six months	BAT 25
		Treatment of WEEE containing VFCs and/or VHCs	Once every six months	BAT 29
		Mechanical treatment of waste with calorific value <sup>(2)</sup>	Once every six months	BAT 31
		Mechanical biological treatment of waste	Once every six months	BAT 34
		Physico-chemical treatment of solid and/or pasty waste <sup>(2)</sup>	Once every six months	BAT 41
		Re-refining of waste oil		BAT 44
		Physico-chemical treatment of waste with calorific value		BAT 45
		Regeneration of spent solvents		BAT 47
		Thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil		BAT 49
		Water washing of excavated contaminated soil		BAT 50
Treatment of water-based liquid waste <sup>(2)</sup>	BAT 53			
Decontamination of equipment containing PCBs <sup>(6)</sup>	Once every three months	BAT 51		

<sup>(1)</sup> Monitoring frequencies may be reduced if the emission levels are proven to be sufficiently stable.

<sup>(2)</sup> The monitoring only applies when the substance concerned is identified as relevant in the waste gas stream based on the inventory mentioned in BAT 3.

<sup>(3)</sup> Instead of EN 1948-1, sampling may also be carried out according to CEN/TS 1948-5.

<sup>(4)</sup> The odour concentration may be monitored instead.

<sup>(5)</sup> The monitoring of NH<sub>3</sub> and H<sub>2</sub>S can be used as an alternative to the monitoring of the odour concentration.

<sup>(6)</sup> The monitoring only applies when solvent is used for cleaning the contaminated equipment.

**BAT 9.** BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below.

Technique		Description
a	Measurement	Sniffing methods, optical gas imaging, solar occultation flux or differential absorption. See descriptions in Section 6.2.
b	Emissions factors	Calculation of emissions based on emissions factors, periodically validated (e.g. once every two years) by measurements.
c	Mass balance	Calculation of diffuse emissions using a mass balance considering the solvent input, channelled emissions to air, emissions to water, the solvent in the process output, and process (e.g. distillation) residues.

**BAT 10.** BAT is to periodically monitor odour emissions.

#### *Description*

Odour emissions can be monitored using:

- EN standards (e.g. dynamic olfactometry according to EN 13725 in order to determine the odour concentration or EN 16841-1 or -2 in order to determine the odour exposure);
- when applying alternative methods for which no EN standards are available (e.g. estimation of odour impact), ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

The monitoring frequency is determined in the odour management plan (see BAT 12).

#### *Applicability*

The applicability is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.

**BAT 11.** BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.

#### *Description*

Monitoring includes direct measurements, calculation or recording, e.g. using suitable meters or invoices. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level) and considers any significant changes in the plant/installation.

### 1.3. Emissions to air

**BAT 12.** In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:

- a protocol containing actions and timelines;
- a protocol for conducting odour monitoring as set out in BAT 10;
- a protocol for response to identified odour incidents, e.g. complaints;
- an odour prevention and reduction programme designed to identify the source(s); to characterise the contributions of the sources; and to implement prevention and/or reduction measures.

*Applicability*

The applicability is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.

**BAT 13.** In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below.

Technique	Description	Applicability
a. Minimising residence times	Minimising the residence time of (potentially) odorous waste in storage or in handling systems (e.g. pipes, tanks, containers), in particular under anaerobic conditions. When relevant, adequate provisions are made for the acceptance of seasonal peak volumes of waste.	Only applicable to open systems.
b. Using chemical treatment	Using chemicals to destroy or to reduce the formation of odorous compounds (e.g. to oxidise or to precipitate hydrogen sulphide).	Not applicable if it may hamper the desired output quality.
c. Optimising aerobic treatment	In the case of aerobic treatment of water-based liquid waste, it may include: <ul style="list-style-type: none"> <li>— use of pure oxygen;</li> <li>— removal of scum in tanks;</li> <li>— frequent maintenance of the aeration system.</li> </ul> In the case of aerobic treatment of waste other than water-based liquid waste, see BAT 36.	Generally applicable.

**BAT 14.** In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.

Depending on the risk posed by the waste in terms of diffuse emissions to air, BAT 14d is especially relevant.

Technique	Description	Applicability
a. Minimising the number of potential diffuse emission sources	This includes techniques such as: <ul style="list-style-type: none"> <li>— appropriate design of piping layout (e.g. minimising pipe run length, reducing the number of flanges and valves, using welded fittings and pipes);</li> <li>— favouring the use of gravity transfer rather than using pumps;</li> <li>— limiting the drop height of material;</li> <li>— limiting traffic speed;</li> <li>— using wind barriers.</li> </ul>	Generally applicable.

	Technique	Description	Applicability
b.	Selection and use of high-integrity equipment	<p>This includes techniques such as:</p> <ul style="list-style-type: none"> <li>— valves with double packing seals or equally efficient equipment;</li> <li>— high-integrity gaskets (such as spiral wound, ring joints) for critical applications;</li> <li>— pumps/compressors/agitators fitted with mechanical seals instead of packing;</li> <li>— magnetically driven pumps/compressor/agitators;</li> <li>— appropriate service hose access ports, piercing pliers, drill heads, e.g. when degassing WEEE containing VFCs and/or VHCs.</li> </ul>	Applicability may be restricted in the case of existing plants due to operability requirements.
c.	Corrosion prevention	<p>This includes techniques such as:</p> <ul style="list-style-type: none"> <li>— appropriate selection of construction materials;</li> <li>— lining or coating of equipment and painting of pipes with corrosion inhibitors.</li> </ul>	Generally applicable.
d.	Containment, collection and treatment of diffuse emissions	<p>This includes techniques such as:</p> <ul style="list-style-type: none"> <li>— storing, treating and handling waste and material that may generate diffuse emissions in enclosed buildings and/or enclosed equipment (e.g. conveyor belts);</li> <li>— maintaining the enclosed equipment or buildings under an adequate pressure;</li> <li>— collecting and directing the emissions to an appropriate abatement system (see Section 6.1) via an air extraction system and/or air suction systems close to the emission sources.</li> </ul>	<p>The use of enclosed equipment or buildings may be restricted by safety considerations such as the risk of explosion or oxygen depletion.</p> <p>The use of enclosed equipment or buildings may also be constrained by the volume of waste.</p>
e.	Dampening	Dampening potential sources of diffuse dust emissions (e.g. waste storage, traffic areas, and open handling processes) with water or fog.	Generally applicable.
f.	Maintenance	<p>This includes techniques such as:</p> <ul style="list-style-type: none"> <li>— ensuring access to potentially leaky equipment;</li> <li>— regularly controlling protective equipment such as lamellar curtains, fast-action doors.</li> </ul>	Generally applicable.

Technique		Description	Applicability
g.	Cleaning of waste treatment and storage areas	This includes techniques such as regularly cleaning the whole waste treatment area (halls, traffic areas, storage areas, etc.), conveyor belts, equipment and containers.	Generally applicable.
h.	Leak detection and repair (LDAR) programme	See Section 6.2. When emissions of organic compounds are expected, a LDAR programme is set up and implemented using a risk-based approach, considering in particular the design of the plant and the amount and nature of the organic compounds concerned.	Generally applicable.

**BAT 15.** BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns) by using both of the techniques given below.

Technique		Description	Applicability
a.	Correct plant design	This includes the provision of a gas recovery system with sufficient capacity and the use of high-integrity relief valves.	Generally applicable to new plants. A gas recovery system may be retrofitted in existing plants.
b.	Plant management	This includes balancing the gas system and using advanced process control.	Generally applicable.

**BAT 16.** In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use both of the techniques given below.

Technique		Description	Applicability
a.	Correct design of flaring devices	Optimisation of height and pressure, assistance by steam, air or gas, type of flare tips, etc., to enable smokeless and reliable operation and to ensure the efficient combustion of excess gases.	Generally applicable to new flares. In existing plants, applicability may be restricted, e.g. due to maintenance time availability.
b.	Monitoring and recording as part of flare management	This includes continuous monitoring of the quantity of gas sent to flaring. It may include estimations of other parameters (e.g. composition of gas flow, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions (e.g. NO <sub>x</sub> , CO, hydrocarbons), noise). The recording of flaring events usually includes the duration and number of events and allows for the quantification of emissions and the potential prevention of future flaring events.	Generally applicable.

#### 1.4. Noise and vibrations

**BAT 17.** In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:

- I. a protocol containing appropriate actions and timelines;
- II. a protocol for conducting noise and vibration monitoring;
- III. a protocol for response to identified noise and vibration events, e.g. complaints;
- IV. a noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.

##### *Applicability*

The applicability is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated.

**BAT 18.** In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.

Technique		Description	Applicability
a.	Appropriate location of equipment and buildings	Noise levels can be reduced by increasing the distance between the emitter and the receiver, by using buildings as noise screens and by relocating building exits or entrances.	For existing plants, the relocation of equipment and building exits or entrances may be restricted by a lack of space or excessive costs.
b.	Operational measures	This includes techniques such as: (i) inspection and maintenance of equipment; (ii) closing of doors and windows of enclosed areas, if possible; (iii) equipment operation by experienced staff; (iv) avoidance of noisy activities at night, if possible; (v) provisions for noise control during maintenance, traffic, handling and treatment activities.	Generally applicable.
c.	Low-noise equipment	This may include direct drive motors, compressors, pumps and flares.	
d.	Noise and vibration control equipment	This includes techniques such as: (i) noise reducers; (ii) acoustic and vibrational insulation of equipment; (iii) enclosure of noisy equipment; (iv) soundproofing of buildings.	Applicability may be restricted by a lack of space (for existing plants).

	Technique	Description	Applicability
e.	Noise attenuation	Noise propagation can be reduced by inserting obstacles between emitters and receivers (e.g. protection walls, embankments and buildings).	Applicable only to existing plants, as the design of new plants should make this technique unnecessary. For existing plants, the insertion of obstacles may be restricted by a lack of space.  For mechanical treatment in shredders of metal wastes, it is applicable within the constraints associated with the risk of deflagration in shredders.

### 1.5. Emissions to water

**BAT 19.** In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.

	Technique	Description	Applicability
a.	Water management	Water consumption is optimised by using measures which may include: <ul style="list-style-type: none"> <li>— water-saving plans (e.g. establishment of water efficiency objectives, flow diagrams and water mass balances);</li> <li>— optimising the use of washing water (e.g. dry cleaning instead of hosing down, using trigger control on all washing equipment);</li> <li>— reducing the use of water for vacuum generation (e.g. use of liquid ring pumps with high boiling point liquids).</li> </ul>	Generally applicable.
b.	Water recirculation	Water streams are recirculated within the plant, if necessary after treatment. The degree of recirculation is limited by the water balance of the plant, the content of impurities (e.g. odorous compounds) and/or the characteristics of the water streams (e.g. nutrient content).	Generally applicable.
c.	Impermeable surface	Depending on the risks posed by the waste in terms of soil and/or water contamination, the surface of the whole waste treatment area (e.g. waste reception, handling, storage, treatment and dispatch areas) is made impermeable to the liquids concerned.	Generally applicable.



	Technique	Description	Applicability
d.	Techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels	<p>Depending on the risks posed by the liquids contained in tanks and vessels in terms of soil and/or water contamination, this includes techniques such as:</p> <ul style="list-style-type: none"> <li>— overflow detectors;</li> <li>— overflow pipes that are directed to a contained drainage system (i.e. the relevant secondary containment or another vessel);</li> <li>— tanks for liquids that are located in a suitable secondary containment; the volume is normally sized to accommodate the loss of containment of the largest tank within the secondary containment;</li> <li>— isolation of tanks, vessels and secondary containment (e.g. closing of valves).</li> </ul>	Generally applicable.
e.	Roofing of waste storage and treatment areas	Depending on the risks posed by the waste in terms of soil and/or water contamination, waste is stored and treated in covered areas to prevent contact with rainwater and thus minimise the volume of contaminated run-off water.	Applicability may be constrained when high volumes of waste are stored or treated (e.g. mechanical treatment in shredders of metal waste).
f.	Segregation of water streams	Each water stream (e.g. surface run-off water, process water) is collected and treated separately, based on the pollutant content and on the combination of treatment techniques. In particular, uncontaminated waste water streams are segregated from waste water streams that require treatment.	Generally applicable to new plants. Generally applicable to existing plants within the constraints associated with the layout of the water collection system.
g.	Adequate drainage infrastructure	<p>The waste treatment area is connected to drainage infrastructure.</p> <p>Rainwater falling on the treatment and storage areas is collected in the drainage infrastructure along with washing water, occasional spillages, etc. and, depending on the pollutant content, recirculated or sent for further treatment.</p>	Generally applicable to new plants. Generally applicable to existing plants within the constraints associated with the layout of the water drainage system.
h.	Design and maintenance provisions to allow detection and repair of leaks	<p>Regular monitoring for potential leakages is risk-based, and, when necessary, equipment is repaired.</p> <p>The use of underground components is minimised. When underground components are used, and depending on the risks posed by the waste contained in those components in terms of soil and/or water contamination, secondary containment of underground components is put in place.</p>	<p>The use of above-ground components is generally applicable to new plants. It may be limited however by the risk of freezing.</p> <p>The installation of secondary containment may be limited in the case of existing plants.</p>

Technique	Description	Applicability
i. Appropriate buffer storage capacity	<p>Appropriate buffer storage capacity is provided for waste water generated during other than normal operating conditions using a risk-based approach (e.g. taking into account the nature of the pollutants, the effects of downstream waste water treatment, and the receiving environment).</p> <p>The discharge of waste water from this buffer storage is only possible after appropriate measures are taken (e.g. monitor, treat, reuse).</p>	<p>Generally applicable to new plants.</p> <p>For existing plants, applicability may be limited by space availability and by the layout of the water collection system.</p>

**BAT 20.** In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below.

Technique (!)	Typical pollutants targeted	Applicability
<i>Preliminary and primary treatment, e.g.</i>		
a. Equalisation	All pollutants	Generally applicable.
b. Neutralisation	Acids, alkalis	
c. Physical separation, e.g. screens, sieves, grit separators, grease separators, oil-water separation or primary settlement tanks	Gross solids, suspended solids, oil/grease	
<i>Physico-chemical treatment, e.g.</i>		
d. Adsorption	Adsorbable dissolved non-biodegradable or inhibitory pollutants, e.g. hydrocarbons, mercury, AOX	Generally applicable.
e. Distillation/rectification	Dissolved non-biodegradable or inhibitory pollutants that can be distilled, e.g. some solvents	
f. Precipitation	Precipitable dissolved non-biodegradable or inhibitory pollutants, e.g. metals, phosphorus	
g. Chemical oxidation	Oxidisable dissolved non-biodegradable or inhibitory pollutants, e.g. nitrite, cyanide	

Technique <sup>(1)</sup>		Typical pollutants targeted	Applicability
h.	Chemical reduction	Reducible dissolved non-biodegradable or inhibitory pollutants, e.g. hexavalent chromium (Cr(VI))	
i.	Evaporation	Soluble contaminants	
j.	Ion exchange	Ionic dissolved non-biodegradable or inhibitory pollutants, e.g. metals	
k.	Stripping	Purgeable pollutants, e.g. hydrogen sulphide (H <sub>2</sub> S), ammonia (NH <sub>3</sub> ), some adsorbable organically bound halogens (AOX), hydrocarbons	
<i>Biological treatment, e.g.</i>			
l.	Activated sludge process	Biodegradable organic compounds	Generally applicable.
m.	Membrane bioreactor		
<i>Nitrogen removal</i>			
n.	Nitrification/denitrification when the treatment includes a biological treatment	Total nitrogen, ammonia	Nitrification may not be applicable in the case of high chloride concentrations (e.g. above 10 g/l) and when the reduction of the chloride concentration prior to nitrification would not be justified by the environmental benefits. Nitrification is not applicable when the temperature of the waste water is low (e.g. below 12 °C).
<i>Solids removal, e.g.</i>			
o.	Coagulation and flocculation	Suspended solids and particulate-bound metals	Generally applicable.
p.	Sedimentation		
q.	Filtration (e.g. sand filtration, microfiltration, ultrafiltration)		
r.	Flotation		

<sup>(1)</sup> The descriptions of the techniques are given in Section 6.3.

Table 6.1

**BAT-associated emission levels (BAT-AELs) for direct discharges to a receiving water body**

Substance/Parameter	BAT-AEL <sup>(1)</sup>	Waste treatment process to which the BAT-AEL applies
Total organic carbon (TOC) <sup>(2)</sup>	10-60 mg/l	— All waste treatments except treatment of water-based liquid waste
	10-100 mg/l <sup>(3)</sup> <sup>(4)</sup>	— Treatment of water-based liquid waste
Chemical oxygen demand (COD) <sup>(2)</sup>	30-180 mg/l	— All waste treatments except treatment of water-based liquid waste
	30-300 mg/l <sup>(3)</sup> <sup>(4)</sup>	— Treatment of water-based liquid waste
Total suspended solids (TSS)	5-60 mg/l	— All waste treatments
Hydrocarbon oil index (HOI)	0,5-10 mg/l	<ul style="list-style-type: none"> <li>— Mechanical treatment in shredders of metal waste</li> <li>— Treatment of WEEE containing VFCs and/or VHCs</li> <li>— Re-refining of waste oil</li> <li>— Physico-chemical treatment of waste with calorific value</li> <li>— Water washing of excavated contaminated soil</li> <li>— Treatment of water-based liquid waste</li> </ul>
Total nitrogen (Total N)	1-25 mg/l <sup>(5)</sup> <sup>(6)</sup>	<ul style="list-style-type: none"> <li>— Biological treatment of waste</li> <li>— Re-refining of waste oil</li> </ul>
	10-60 mg/l <sup>(5)</sup> <sup>(6)</sup> <sup>(7)</sup>	— Treatment of water-based liquid waste
Total phosphorus (Total P)	0,3-2 mg/l	— Biological treatment of waste
	1-3 mg/l <sup>(4)</sup>	— Treatment of water-based liquid waste
Phenol index	0,05-0,2 mg/l	<ul style="list-style-type: none"> <li>— Re-refining of waste oil</li> <li>— Physico-chemical treatment of waste with calorific value</li> </ul>
	0,05-0,3 mg/l	— Treatment of water-based liquid waste
Free cyanide (CN) <sup>(8)</sup>	0,02-0,1 mg/l	— Treatment of water-based liquid waste
Adsorbable organically bound halogens (AOX) <sup>(8)</sup>	0,2-1 mg/l	— Treatment of water-based liquid waste

Substance/Parameter	BAT-AEL <sup>(1)</sup>	Waste treatment process to which the BAT-AEL applies	
Arsenic (expressed as As)	0,01-0,05 mg/l	<ul style="list-style-type: none"> <li>— Mechanical treatment in shredders of metal waste</li> <li>— Treatment of WEEE containing VFCs and/or VHCs</li> <li>— Mechanical biological treatment of waste</li> <li>— Re-refining of waste oil</li> <li>— Physico-chemical treatment of waste with calorific value</li> <li>— Physico-chemical treatment of solid and/or pasty waste</li> <li>— Regeneration of spent solvents</li> <li>— Water washing of excavated contaminated soil</li> </ul>	
Cadmium (expressed as Cd)	0,01-0,05 mg/l		
Chromium (expressed as Cr)	0,01-0,15 mg/l		
Copper (expressed as Cu)	0,05-0,5 mg/l		
Lead (expressed as Pb)	0,05-0,1 mg/l <sup>(9)</sup>		
Nickel (expressed as Ni)	0,05-0,5 mg/l		
Mercury (expressed as Hg)	0,5-5 µg/l		
Zinc (expressed as Zn)	0,1-1 mg/l <sup>(10)</sup>		
Metals and metalloids <sup>(8)</sup>	Arsenic (expressed as As)	0,01-0,1 mg/l	— Treatment of water-based liquid waste
	Cadmium (expressed as Cd)	0,01-0,1 mg/l	
	Chromium (expressed as Cr)	0,01-0,3 mg/l	
	Hexavalent chromium (expressed as Cr(VI))	0,01-0,1 mg/l	
	Copper (expressed as Cu)	0,05-0,5 mg/l	
	Lead (expressed as Pb)	0,05-0,3 mg/l	
	Nickel (expressed as Ni)	0,05-1 mg/l	
	Mercury (expressed as Hg)	1-10 µg/l	
	Zinc (expressed as Zn)	0,1-2 mg/l	

<sup>(1)</sup> The averaging periods are defined in the General considerations.

<sup>(2)</sup> Either the BAT-AEL for COD or the BAT-AEL for TOC applies. TOC monitoring is the preferred option because it does not rely on the use of very toxic compounds.

<sup>(3)</sup> The upper end of the range may not apply:

- when the abatement efficiency is  $\geq 95\%$  as a rolling yearly average and the waste input shows the following characteristics: TOC > 2 g/l (or COD > 6 g/l) as a daily average and a high proportion of refractory organic compounds (i.e. which are difficult to biodegrade); or
- in the case of high chloride concentrations (e.g. above 5 g/l in the waste input).

<sup>(4)</sup> The BAT-AEL may not apply to plants treating drilling muds/cuttings.

<sup>(5)</sup> The BAT-AEL may not apply when the temperature of the waste water is low (e.g. below 12 °C).

<sup>(6)</sup> The BAT-AEL may not apply in the case of high chloride concentrations (e.g. above 10 g/l in the waste input).

<sup>(7)</sup> The BAT-AEL only applies when biological treatment of waste water is used.

<sup>(8)</sup> The BAT-AELs only apply when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3.

<sup>(9)</sup> The upper end of the range is 0,3 mg/l for mechanical treatment in shredders of metal waste.

<sup>(10)</sup> The upper end of the range is 2 mg/l for mechanical treatment in shredders of metal waste.

The associated monitoring is given in BAT 7.

Table 6.2

**BAT-associated emission levels (BAT-AELs) for indirect discharges to a receiving water body**

Substance/Parameter		BAT-AEL <sup>(1)</sup> <sup>(2)</sup>	Waste treatment process to which the BAT-AEL applies
Hydrocarbon oil index (HOI)		0,5-10 mg/l	<ul style="list-style-type: none"> <li>— Mechanical treatment in shredders of metal waste</li> <li>— Treatment of WEEE containing VFCs and/or VHCs</li> <li>— Re-refining of waste oil</li> <li>— Physico-chemical treatment of waste with calorific value</li> <li>— Water washing of excavated contaminated soil</li> <li>— Treatment of water-based liquid waste</li> </ul>
Free cyanide (CN) <sup>(3)</sup>		0,02-0,1 mg/l	— Treatment of water-based liquid waste
Adsorbable organically bound halogens (AOX) <sup>(3)</sup>		0,2-1 mg/l	— Treatment of water-based liquid waste
Metals and metalloids <sup>(3)</sup>	Arsenic (expressed as As)	0,01-0,05 mg/l	<ul style="list-style-type: none"> <li>— Mechanical treatment in shredders of metal waste</li> <li>— Treatment of WEEE containing VFCs and/or VHCs</li> <li>— Mechanical biological treatment of waste</li> <li>— Re-refining of waste oil</li> <li>— Physico-chemical treatment of waste with calorific value</li> <li>— Physico-chemical treatment of solid and/or pasty waste</li> <li>— Regeneration of spent solvents</li> <li>— Water washing of excavated contaminated soil</li> </ul>
	Cadmium (expressed as Cd)	0,01-0,05 mg/l	
	Chromium (expressed as Cr)	0,01-0,15 mg/l	
	Copper (expressed as Cu)	0,05-0,5 mg/l	
	Lead (expressed as Pb)	0,05-0,1 mg/l <sup>(4)</sup>	
	Nickel (expressed as Ni)	0,05-0,5 mg/l	
	Mercury (expressed as Hg)	0,5-5 µg/l	
	Zinc (expressed as Zn)	0,1-1 mg/l <sup>(5)</sup>	
	Arsenic (expressed as As)	0,01-0,1 mg/l	
Cadmium (expressed as Cd)	0,01-0,1 mg/l		
Chromium (expressed as Cr)	0,01-0,3 mg/l		

Substance/Parameter	BAT-AEL <sup>(1)</sup> <sup>(2)</sup>	Waste treatment process to which the BAT-AEL applies
Hexavalent chromium (expressed as Cr(VI))	0,01-0,1 mg/l	
Copper (expressed as Cu)	0,05-0,5 mg/l	
Lead (expressed as Pb)	0,05-0,3 mg/l	
Nickel (expressed as Ni)	0,05-1 mg/l	
Mercury (expressed as Hg)	1-10 µg/l	
Zinc (expressed as Zn)	0,1-2 mg/l	

<sup>(1)</sup> The averaging periods are defined in the General considerations.

<sup>(2)</sup> The BAT-AELs may not apply if the downstream waste water treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.

<sup>(3)</sup> The BAT-AELs only apply when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3.

<sup>(4)</sup> The upper end of the range is 0,3 mg/l for mechanical treatment in shredders of metal waste.

<sup>(5)</sup> The upper end of the range is 2 mg/l for mechanical treatment in shredders of metal waste.

The associated monitoring is given in BAT 7.

#### 1.6. Emissions from accidents and incidents

**BAT 21.** In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan (see BAT 1).

Technique	Description
a. Protection measures	These include measures such as: <ul style="list-style-type: none"> <li>— protection of the plant against malevolent acts;</li> <li>— fire and explosion protection system, containing equipment for prevention, detection, and extinction;</li> <li>— accessibility and operability of relevant control equipment in emergency situations.</li> </ul>
b. Management of incidental/accidental emissions	Procedures are established and technical provisions are in place to manage (in terms of possible containment) emissions from accidents and incidents such as emissions from spillages, firefighting water, or safety valves.
c. Incident/accident registration and assessment system	This includes techniques such as: <ul style="list-style-type: none"> <li>— a log/diary to record all accidents, incidents, changes to procedures and the findings of inspections;</li> <li>— procedures to identify, respond to and learn from such incidents and accidents.</li> </ul>

#### 1.7. Material efficiency

**BAT 22.** In order to use materials efficiently, BAT is to substitute materials with waste.

*Description*

Waste is used instead of other materials for the treatment of wastes (e.g. waste alkalis or waste acids are used for pH adjustment, fly ashes are used as binders).

*Applicability*

Some applicability limitations derive from the risk of contamination posed by the presence of impurities (e.g. heavy metals, POPs, salts, pathogens) in the waste that substitutes other materials. Another limitation is the compatibility of the waste substituting other materials with the waste input (see BAT 2).

**1.8. Energy efficiency**

**BAT 23.** In order to use energy efficiently, BAT is to use both of the techniques given below.

Technique		Description
a.	Energy efficiency plan	An energy efficiency plan entails defining and calculating the specific energy consumption of the activity (or activities), setting key performance indicators on an annual basis (for example, specific energy consumption expressed in kWh/tonne of waste processed) and planning periodic improvement targets and related actions. The plan is adapted to the specificities of the waste treatment in terms of process(es) carried out, waste stream(s) treated, etc.
b.	Energy balance record	An energy balance record provides a breakdown of the energy consumption and generation (including exportation) by the type of source (i.e. electricity, gas, conventional liquid fuels, conventional solid fuels, and waste). This includes: <ul style="list-style-type: none"> <li>(i) information on energy consumption in terms of delivered energy;</li> <li>(ii) information on energy exported from the installation;</li> <li>(iii) energy flow information (e.g. Sankey diagrams or energy balances) showing how the energy is used throughout the process.</li> </ul> The energy balance record is adapted to the specificities of the waste treatment in terms of process(es) carried out, waste stream(s) treated, etc.

**1.9. Reuse of packaging**

**BAT 24.** In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging, as part of the residues management plan (see BAT 1).

*Description*

Packaging (drums, containers, IBCs, pallets, etc.) is reused for containing waste, when it is in good condition and sufficiently clean, depending on a compatibility check between the substances contained (in consecutive uses). If necessary, packaging is sent for appropriate treatment prior to reuse (e.g. reconditioning, cleaning).

*Applicability*

Some applicability restrictions derive from the risk of contamination of the waste posed by the reused packaging.

**2. BAT CONCLUSIONS FOR THE MECHANICAL TREATMENT OF WASTE**

Unless otherwise stated, the BAT conclusions presented in Section 2 apply to the mechanical treatment of waste when it is not combined with biological treatment, and in addition to the general BAT conclusions in Section 1.



## 2.1. General BAT conclusions for the mechanical treatment of waste

### 2.1.1. Emissions to air

**BAT 25.** In order to reduce emissions to air of dust, and of particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description	Applicability
a.	Cyclone	See Section 6.1. Cyclones are mainly used as preliminary separators for coarse dust.	Generally applicable.
b.	Fabric filter	See Section 6.1.	May not be applicable to exhaust air ducts directly connected to the shredder when the effects of deflagration on the fabric filter cannot be mitigated (e.g. by using pressure relief valves).
c.	Wet scrubbing	See Section 6.1.	Generally applicable.
d.	Water injection into the shredder	The waste to be shredded is damped by injecting water into the shredder. The amount of water injected is regulated in relation to the amount of waste being shredded (which may be monitored via the energy consumed by the shredder motor). The waste gas that contains residual dust is directed to cyclone(s) and/or a wet scrubber.	Only applicable within the constraints associated with local conditions (e.g. low temperature, drought).

Table 6.3

### BAT-associated emission level (BAT-AEL) for channelled dust emissions to air from the mechanical treatment of waste

Parameter	Unit	BAT-AEL (Average over the sampling period)
Dust	mg/Nm <sup>3</sup>	2-5 <sup>(1)</sup>

<sup>(1)</sup> When a fabric filter is not applicable, the upper end of the range is 10 mg/Nm<sup>3</sup>.

The associated monitoring is given in BAT 8.

## 2.2. BAT conclusions for the mechanical treatment in shredders of metal waste

Unless otherwise stated, the BAT conclusions presented in this section apply to the mechanical treatment in shredders of metal waste, in addition to BAT 25.

### 2.2.1. Overall environmental performance

**BAT 26.** In order to improve the overall environmental performance, and to prevent emissions due to accidents and incidents, BAT is to use BAT 14g and all of the techniques given below:

- (a) implementation of a detailed inspection procedure for baled waste before shredding;

- (b) removal of dangerous items from the waste input stream and their safe disposal (e.g. gas cylinders, non-depolluted EoLVs, non-depolluted WEEE, items contaminated with PCBs or mercury, radioactive items);
- (c) treatment of containers only when accompanied by a declaration of cleanliness.

### 2.2.2. Deflagrations

**BAT 27.** In order to prevent deflagrations and to reduce emissions when deflagrations occur, BAT is to use technique a. and one or both of the techniques b. and c. given below.

Technique	Description	Applicability
a. Deflagration management plan	This includes: <ul style="list-style-type: none"> <li>— a deflagration reduction programme designed to identify the source(s), and to implement measures to prevent deflagration occurrences, e.g. inspection of waste input as described in BAT 26a, removal of dangerous items as described in BAT 26b;</li> <li>— a review of historical deflagration incidents and remedies and the dissemination of deflagration knowledge;</li> <li>— a protocol for response to deflagration incidents.</li> </ul>	Generally applicable.
b. Pressure relief dampers	Pressure relief dampers are installed to relieve pressure waves coming from deflagrations that would otherwise cause major damage and subsequent emissions.	
c. Pre-shredding	Use of a low-speed shredder installed upstream of the main shredder	Generally applicable for new plants, depending on the input material. Applicable for major plant upgrades where a significant number of deflagrations have been substantiated.

### 2.2.3. Energy efficiency

**BAT 28.** In order to use energy efficiently, BAT is to keep the shredder feed stable.

#### *Description*

The shredder feed is equalised by avoiding disruption or overload of the waste feed which would lead to unwanted shutdowns and start-ups of the shredder.

### 2.3. BAT conclusions for the treatment of WEEE containing VFCs and/or VHCs

Unless otherwise stated, the BAT conclusions presented in this section apply to the treatment of WEEE containing VFCs and/or VHCs, in addition to BAT 25.

## 2.3.1. Emissions to air

**BAT 29.** In order to prevent or, where that is not practicable, to reduce emissions of organic compounds to air, BAT is to apply BAT 14d, BAT 14h and to use technique a. and one or both of the techniques b. and c. given below.

Technique		Description
a.	Optimised removal and capture of refrigerants and oils	All refrigerants and oils are removed from the WEEE containing VFCs and/or VHCs and captured by a vacuum suction system (e.g. achieving refrigerant removal of at least 90 %). Refrigerants are separated from oils and the oils are degassed. The amount of oil remaining in the compressor is reduced to a minimum (so that the compressor does not drip).
b.	Cryogenic condensation	Waste gas containing organic compounds such as VFCs/VHCs is sent to a cryogenic condensation unit where they are liquefied (see description in Section 6.1). The liquefied gas is stored in pressurised vessels for further treatment.
c.	Adsorption	Waste gas containing organic compounds such as VFCs/VHCs is led into adsorption systems (see description in Section 6.1). The spent activated carbon is regenerated by means of heated air pumped into the filter to desorb the organic compounds. Subsequently, the regeneration waste gas is compressed and cooled in order to liquefy the organic compounds (in some cases by cryogenic condensation). The liquefied gas is then stored in pressurised vessels. The remaining waste gas from the compression stage is usually led back into the adsorption system in order to minimise VFC/VHC emissions.

Table 6.4

**BAT-associated emission levels (BAT-AELs) for channelled TVOC and CFC emissions to air from the treatment of WEEE containing VFCs and/or VHCs**

Parameter	Unit	BAT-AEL (Average over the sampling period)
TVOC	mg/Nm <sup>3</sup>	3-15
CFCs	mg/Nm <sup>3</sup>	0,5-10

The associated monitoring is given in BAT 8.

## 2.3.2. Explosions

**BAT 30.** In order to prevent emissions due to explosions when treating WEEE containing VFCs and/or VHCs, BAT is to use either of the techniques given below.

Technique		Description
a.	Inert atmosphere	By injecting inert gas (e.g. nitrogen), the oxygen concentration in enclosed equipment (e.g. in enclosed shredders, crushers, dust and foam collectors) is reduced (e.g. to 4 vol-%).
b.	Forced ventilation	By using forced ventilation, the hydrocarbon concentration in enclosed equipment (e.g. in enclosed shredders, crushers, dust and foam collectors) is reduced to < 25 % of the lower explosive limit.

#### 2.4. BAT conclusions for the mechanical treatment of waste with calorific value

In addition to BAT 25, the BAT conclusions presented in this section apply to the mechanical treatment of waste with calorific value covered by points 5.3(a)(iii) and 5.3(b)(ii) of Annex I to Directive 2010/75/EU.

##### 2.4.1. Emissions to air

**BAT 31.** In order to reduce emissions to air of organic compounds, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Biofilter	
c.	Thermal oxidation	
d.	Wet scrubbing	

Table 6.5

#### BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from the mechanical treatment of waste with calorific value

Parameter	Unit	BAT-AEL (Average over the sampling period)
TVOC	mg/Nm <sup>3</sup>	10-30 <sup>(1)</sup>

<sup>(1)</sup> The BAT-AEL only applies when organic compounds are identified as relevant in the waste gas stream, based on the inventory mentioned in BAT 3.

The associated monitoring is given in BAT 8.

#### 2.5. BAT conclusions for the mechanical treatment of WEEE containing mercury

Unless otherwise stated, the BAT conclusions presented in this section apply to the mechanical treatment of WEEE containing mercury, in addition to BAT 25.

##### 2.5.1. Emissions to air

**BAT 32.** In order to reduce mercury emissions to air, BAT is to collect mercury emissions at source, to send them to abatement and to carry out adequate monitoring.

##### Description

This includes all of the following measures:

- equipment used to treat WEEE containing mercury is enclosed, under negative pressure and connected to a local exhaust ventilation (LEV) system;
- waste gas from the processes is treated by dedusting techniques such as cyclones, fabric filters, and HEPA filters, followed by adsorption on activated carbon (see Section 6.1);
- the efficiency of the waste gas treatment is monitored;
- mercury levels in the treatment and storage areas are measured frequently (e.g. once every week) to detect potential mercury leaks.

Table 6.6

**BAT-associated emission level (BAT-AEL) for channelled mercury emissions to air from the mechanical treatment of WEEE containing mercury**

Parameter	Unit	BAT-AEL (Average over the sampling period)
Mercury (Hg)	µg/Nm <sup>3</sup>	2-7

The associated monitoring is given in BAT 8.

### 3. BAT CONCLUSIONS FOR THE BIOLOGICAL TREATMENT OF WASTE

Unless otherwise stated, the BAT conclusions presented in Section 3 apply to the biological treatment of waste, and in addition to the general BAT conclusions in Section 1. The BAT conclusions in Section 3 do not apply to the treatment of water-based liquid waste.

#### 3.1. General BAT conclusions for the biological treatment of waste

##### 3.1.1. Overall environmental performance

**BAT 33.** In order to reduce odour emissions and to improve the overall environmental performance, BAT is to select the waste input.

##### *Description*

The technique consists of carrying out the pre-acceptance, acceptance and sorting of the waste input (see BAT 2) so as to ensure the suitability of the waste input for the waste treatment, e.g. in terms of nutrient balance, moisture or toxic compounds which may reduce the biological activity.

##### 3.1.2. Emissions to air

**BAT 34.** In order to reduce channelled emissions to air of dust, organic compounds and odorous compounds, including H<sub>2</sub>S and NH<sub>3</sub>, BAT is to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Biofilter	See Section 6.1. A pretreatment of the waste gas before the biofilter (e.g. with a water or acid scrubber) may be needed in the case of a high NH <sub>3</sub> content (e.g. 5-40 mg/Nm <sup>3</sup> ) in order to control the media pH and to limit the formation of N <sub>2</sub> O in the biofilter. Some other odorous compounds (e.g. mercaptans, H <sub>2</sub> S) can cause acidification of the biofilter media and necessitate the use of a water or alkaline scrubber for pretreatment of the waste gas before the biofilter.
c.	Fabric filter	See Section 6.1. The fabric filter is used in the case of mechanical biological treatment of waste.
d.	Thermal oxidation	See Section 6.1.
e.	Wet scrubbing	See Section 6.1. Water, acid or alkaline scrubbers are used in combination with a biofilter, thermal oxidation or adsorption on activated carbon.

Table 6.7

**BAT-associated emission levels (BAT-AELs) for channelled NH<sub>3</sub>, odour, dust and TVOC emissions to air from the biological treatment of waste**

Parameter	Unit	BAT-AEL (Average over the sampling period)	Waste treatment process
NH <sub>3</sub> <sup>(1)</sup> <sup>(2)</sup>	mg/Nm <sup>3</sup>	0,3-20	All biological treatments of waste
Odour concentration <sup>(1)</sup> <sup>(2)</sup>	ou <sub>E</sub> /Nm <sup>3</sup>	200-1 000	
Dust	mg/Nm <sup>3</sup>	2-5	Mechanical biological treatment of waste
TVOC	mg/Nm <sup>3</sup>	5-40 <sup>(3)</sup>	

<sup>(1)</sup> Either the BAT-AEL for NH<sub>3</sub> or the BAT-AEL for the odour concentration applies.

<sup>(2)</sup> This BAT-AEL does not apply to the treatment of waste mainly composed of manure.

<sup>(3)</sup> The lower end of the range can be achieved by using thermal oxidation.

The associated monitoring is given in BAT 8.

### 3.1.3. Emissions to water and water usage

**BAT 35.** In order to reduce the generation of waste water and to reduce water usage, BAT is to use all of the techniques given below.

Technique	Description	Applicability
a. Segregation of water streams	Leachate seeping from compost piles and windrows is segregated from surface run-off water (see BAT 19f).	Generally applicable to new plants. Generally applicable to existing plants within the constraints associated with the layout of the water circuits.
b. Water recirculation	Recirculating process water streams (e.g. from dewatering of liquid digestate in anaerobic processes) or using as much as possible other water streams (e.g. water condensate, rinsing water, surface run-off water). The degree of recirculation is limited by the water balance of the plant, the content of impurities (e.g. heavy metals, salts, pathogens, odorous compounds) and/or the characteristics of the water streams (e.g. nutrient content).	Generally applicable.
c. Minimisation of the generation of leachate	Optimising the moisture content of the waste in order to minimise the generation of leachate.	Generally applicable.

### 3.2. BAT conclusions for the aerobic treatment of waste

Unless otherwise stated, the BAT conclusions presented in this section apply to the aerobic treatment of waste, and in addition to the general BAT conclusions for the biological treatment of waste in Section 3.1.

## 3.2.1. Overall environmental performance

**BAT 36.** In order to reduce emissions to air and to improve the overall environmental performance, BAT is to monitor and/or control the key waste and process parameters.

*Description*

Monitoring and/or control of key waste and process parameters, including:

- waste input characteristics (e.g. C to N ratio, particle size);
- temperature and moisture content at different points in the windrow;
- aeration of the windrow (e.g. via the windrow turning frequency, O<sub>2</sub> and/or CO<sub>2</sub> concentration in the windrow, temperature of air streams in the case of forced aeration);
- windrow porosity, height and width.

*Applicability*

Monitoring of the moisture content in the windrow is not applicable to enclosed processes when health and/or safety issues have been identified. In that case, the moisture content can be monitored before loading the waste into the enclosed composting stage and adjusted when it exits the enclosed composting stage.

## 3.2.2. Odour and diffuse emissions to air

**BAT 37.** In order to reduce diffuse emissions to air of dust, odour and bioaerosols from open-air treatment steps, BAT is to use one or both of the techniques given below.

	Technique	Description	Applicability
a.	Use of semipermeable membrane covers	Active composting windrows are covered by semipermeable membranes.	Generally applicable.
b.	Adaptation of operations to the meteorological conditions	<p>This includes techniques such as the following:</p> <ul style="list-style-type: none"> <li>— Taking into account weather conditions and forecasts when undertaking major outdoor process activities. For instance, avoiding formation or turning of windrows or piles, screening or shredding in the case of adverse meteorological conditions in terms of emissions dispersion (e.g. the wind speed is too low or too high, or the wind blows in the direction of sensitive receptors).</li> <li>— Orientating windrows, so that the smallest possible area of composting mass is exposed to the prevailing wind, to reduce the dispersion of pollutants from the windrow surface. The windrows and piles are preferably located at the lowest elevation within the overall site layout.</li> </ul>	Generally applicable.

3.3. **BAT conclusions for the anaerobic treatment of waste**

Unless otherwise stated, the BAT conclusions presented in this section apply to the anaerobic treatment of waste, and in addition to the general BAT conclusions for the biological treatment of waste in Section 3.1.

## 3.3.1. Emissions to air

**BAT 38.** In order to reduce emissions to air and to improve the overall environmental performance, BAT is to monitor and/or control the key waste and process parameters.

*Description*

Implementation of a manual and/or automatic monitoring system to:

- ensure a stable digester operation;
- minimise operational difficulties, such as foaming, which may lead to odour emissions;
- provide sufficient early warning of system failures which may lead to a loss of containment and explosions.

This includes monitoring and/or control of key waste and process parameters, e.g.:

- pH and alkalinity of the digester feed;
- digester operating temperature;
- hydraulic and organic loading rates of the digester feed;
- concentration of volatile fatty acids (VFA) and ammonia within the digester and digestate;
- biogas quantity, composition (e.g. H<sub>2</sub>S) and pressure;
- liquid and foam levels in the digester.

### 3.4. BAT conclusions for the mechanical biological treatment (MBT) of waste

Unless otherwise stated, the BAT conclusions presented in this section apply to MBT, and in addition to the general BAT conclusions for the biological treatment of waste in Section 3.1.

The BAT conclusions for the aerobic treatment (Section 3.2) and anaerobic treatment (Section 3.3) of waste apply, when relevant, to the mechanical biological treatment of waste.

#### 3.4.1. Emissions to air

**BAT 39.** In order to reduce emissions to air, BAT is to use both of the techniques given below.

Technique		Description	Applicability
a.	Segregation of the waste gas streams	Splitting of the total waste gas stream into waste gas streams with a high pollutant content and waste gas streams with a low pollutant content, as identified in the inventory mentioned in BAT 3.	Generally applicable to new plants. Generally applicable to existing plants within the constraints associated with the layout of the air circuits.
b.	Recirculation of waste gas	Recirculation of waste gas with a low pollutant content in the biological process followed by waste gas treatment adapted to the concentration of pollutants (see BAT 34). The use of waste gas in the biological process may be limited by the waste gas temperature and/or the pollutant content. It may be necessary to condense the water vapour contained in the waste gas before re-use. In this case, cooling is necessary, and the condensed water is recirculated when possible (see BAT 35) or treated before discharge.	



## 4. BAT CONCLUSIONS FOR THE PHYSICO-CHEMICAL TREATMENT OF WASTE

Unless otherwise stated, the BAT conclusions presented in Section 4 apply to the physico-chemical treatment of waste, and in addition to the general BAT conclusions in Section 1.

## 4.1. BAT conclusions for the physico-chemical treatment of solid and/or pasty waste

## 4.1.1. Overall environmental performance

**BAT 40.** In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2).

*Description*

Monitoring the waste input, e.g. in terms of:

- content of organics, oxidising agents, metals (e.g. mercury), salts, odorous compounds;
- H<sub>2</sub> formation potential upon mixing of flue-gas treatment residues, e.g. fly ashes, with water.

## 4.1.2. Emissions to air

**BAT 41.** In order to reduce emissions of dust, organic compounds and NH<sub>3</sub> to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Biofilter	
c.	Fabric filter	
d.	Wet scrubbing	

Table 6.8

**BAT-associated emission level (BAT-AEL) for channelled emissions of dust to air from the physico-chemical treatment of solid and/or pasty waste**

Parameter	Unit	BAT-AEL (Average over the sampling period)
Dust	mg/Nm <sup>3</sup>	2-5

The associated monitoring is given in BAT 8.

## 4.2. BAT conclusions for the re-refining of waste oil

## 4.2.1. Overall environmental performance

**BAT 42.** In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2).

*Description*

Monitoring of the waste input in terms of content of chlorinated compounds (e.g. chlorinated solvents or PCBs).

**BAT 43.** In order to reduce the quantity of waste sent for disposal, BAT is to use one or both of the techniques given below.

Technique		Description
a.	Material recovery	Using the organic residues from vacuum distillation, solvent extraction, thin film evaporators, etc. in asphalt products, etc.
b.	Energy recovery	Using the organic residues from vacuum distillation, solvent extraction, thin film evaporators, etc. to recover energy.

#### 4.2.2. Emissions to air

**BAT 44.** In order to reduce emissions of organic compounds to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Thermal oxidation	See Section 6.1. This includes when the waste gas is sent to a process furnace or a boiler.
c.	Wet scrubbing	See Section 6.1.

The BAT-AEL set in Section 4.5 applies.

The associated monitoring is given in BAT 8.

### 4.3. BAT conclusions for the physico-chemical treatment of waste with calorific value

#### 4.3.1. Emissions to air

**BAT 45.** In order to reduce emissions of organic compounds to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1
b.	Cryogenic condensation	
c.	Thermal oxidation	
d.	Wet scrubbing	

The BAT-AEL set in Section 4.5 applies.

The associated monitoring is given in BAT 8.

#### 4.4. BAT conclusions for the regeneration of spent solvents

##### 4.4.1. Overall environmental performance

**BAT 46.** In order to improve the overall environmental performance of the regeneration of spent solvents, BAT is to use one or both of the techniques given below.

	Technique	Description	Applicability
a.	Material recovery	Solvents are recovered from the distillation residues by evaporation.	Applicability may be restricted when the energy demand is excessive with regards to the quantity of solvent recovered.
b.	Energy recovery	The residues from distillation are used to recover energy.	Generally applicable.

##### 4.4.2. Emissions to air

**BAT 47.** In order to reduce emissions of organic compounds to air, BAT is to apply BAT 14d and to use a combination of the techniques given below.

	Technique	Description	Applicability
a.	Recirculation of process off-gases in a steam boiler	The process off-gases from the condensers are sent to the steam boiler supplying the plant.	May not be applicable to the treatment of halogenated solvent wastes, in order to avoid generating and emitting PCBs and/or PCDD/F.
b.	Adsorption	See Section 6.1.	There may be limitations to the applicability of the technique due to safety reasons (e.g. activated carbon beds tend to self-ignite when loaded with ketones).
c.	Thermal oxidation	See Section 6.1.	May not be applicable to the treatment of halogenated solvent wastes, in order to avoid generating and emitting PCBs and/or PCDD/F.
d.	Condensation or cryogenic condensation	See Section 6.1.	Generally applicable.
e.	Wet scrubbing	See Section 6.1.	Generally applicable.

The BAT-AEL set in Section 4.5 applies.

The associated monitoring is given in BAT 8.

4.5. **BAT-AEL for emissions of organic compounds to air from the re-refining of waste oil, the physico-chemical treatment of waste with calorific value and the regeneration of spent solvents**

Table 6.9

**BAT-associated emission level (BAT-AEL) for channelled emissions of TVOC to air from the re-refining of waste oil, the physico-chemical treatment of waste with calorific value and the regeneration of spent solvents**

Parameter	Unit	BAT-AEL <sup>(1)</sup> (Average over the sampling period)
TVOC	mg/Nm <sup>3</sup>	5-30

<sup>(1)</sup> The BAT-AEL does not apply when the emission load is below 2 kg/h at the emission point provided that no CMR substances are identified as relevant in the waste gas stream, based on the inventory mentioned in BAT 3.

4.6. **BAT conclusions for the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil**

4.6.1. Overall environmental performance

**BAT 48.** In order to improve the overall environmental performance of the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil, BAT is to use all of the techniques given below.

Technique	Description	Applicability
a. Heat recovery from the furnace off-gas	Recovered heat may be used, for example, for preheating of combustion air or for the generation of steam, which is also used in the reactivation of the spent activated carbon.	Generally applicable.
b. Indirectly fired furnace	An indirectly fired furnace is used to avoid contact between the contents of the furnace and the flue-gases from the burner(s).	Indirectly fired furnaces are normally constructed with a metal tube and applicability may be restricted due to corrosion problems. There may be also economic restrictions for retrofitting existing plants.
c. Process-integrated techniques to reduce emissions to air	This includes techniques such as: — control of the furnace temperature and of the rotation speed of the rotary furnace; — choice of fuel; — use of a sealed furnace or operation of the furnace at a reduced pressure to avoid diffuse emissions to air.	Generally applicable.

## 4.6.2. Emissions to air

**BAT 49.** In order to reduce emissions of HCl, HF, dust and organic compounds to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Cyclone	See Section 6.1. The technique is used in combination with further abatement techniques.
b.	Electrostatic precipitator (ESP)	See Section 6.1.
c.	Fabric filter	
d.	Wet scrubbing	
e.	Adsorption	
f.	Condensation	
g.	Thermal oxidation <sup>(1)</sup>	

<sup>(1)</sup> Thermal oxidation is carried out with a minimum temperature of 1 100 °C and a two-second residence time for the regeneration of activated carbon used in industrial applications where refractory halogenated or other thermally resistant substances are likely to be present. In the case of activated carbon used for potable water- and food-grade applications, an afterburner with a minimum heating temperature of 850 °C and a two-second residence time is sufficient (see Section 6.1).

The associated monitoring is given in BAT 8.

4.7. **BAT conclusions for the water washing of excavated contaminated soil**

## 4.7.1. Emissions to air

**BAT 50.** In order to reduce emissions of dust and organic compounds to air from the storage, handling, and washing steps, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Fabric filter	
c.	Wet scrubbing	

The associated monitoring is given in BAT 8.

4.8. **BAT conclusions for the decontamination of equipment containing PCBs**

## 4.8.1. Overall environmental performance

**BAT 51.** In order to improve the overall environmental performance and to reduce channelled emissions of PCBs and organic compounds to air, BAT is to use all of the techniques given below.

Technique		Description
a.	Coating of the storage and treatment areas	This includes techniques such as: — resin coating applied to the concrete floor of the whole storage and treatment area.

Technique		Description
b.	Implementation of staff access rules to prevent dispersion of contamination	This includes techniques such as: <ul style="list-style-type: none"> <li>— access points to storage and treatment areas are locked;</li> <li>— special qualification is required to access the area where the contaminated equipment is stored and handled;</li> <li>— separate ‘clean’ and ‘dirty’ cloakrooms to put on/remove individual protective outfit.</li> </ul>
c.	Optimised equipment cleaning and drainage	This includes techniques such as: <ul style="list-style-type: none"> <li>— external surfaces of the contaminated equipment are cleaned with anionic detergent;</li> <li>— emptying of the equipment with a pump or under vacuum instead of gravity emptying;</li> <li>— procedures are defined and used for filling, emptying and (dis)connecting the vacuum vessel;</li> <li>— a long period of drainage (at least 12 hours) is ensured to avoid any dripping of contaminated liquid during further treatment operations, after the separation of the core from the casing of an electrical transformer.</li> </ul>
d.	Control and monitoring of emissions to air	This includes techniques such as: <ul style="list-style-type: none"> <li>— the air of the decontamination area is collected and treated with activated carbon filters;</li> <li>— the exhaust of the vacuum pump mentioned in technique c. above is connected to an end-of-pipe abatement system (e.g. a high-temperature incinerator, thermal oxidation or adsorption on activated carbon);</li> <li>— the channelled emissions are monitored (see BAT 8);</li> <li>— the potential atmospheric deposition of PCBs is monitored (e.g. through physico-chemical measurements or biomonitoring).</li> </ul>
e.	Disposal of waste treatment residues	This includes techniques such as: <ul style="list-style-type: none"> <li>— porous, contaminated parts of the electrical transformer (wood and paper) are sent to high-temperature incineration;</li> <li>— PCBs in the oils are destroyed (e.g. dechlorination, hydrogenation, solvated electron processes, high-temperature incineration).</li> </ul>
f.	Recovery of solvent when solvent washing is used	Organic solvent is collected and distilled to be reused in the process.

The associated monitoring is given in BAT 8.

## 5. BAT CONCLUSIONS FOR THE TREATMENT OF WATER-BASED LIQUID WASTE

Unless otherwise stated, the BAT conclusions presented in Section 5 apply to the treatment of water-based liquid waste, and in addition to the general BAT conclusions in Section 1.

### 5.1. Overall environmental performance

**BAT 52.** In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2).

*Description*

Monitoring the waste input, e.g. in terms of:

- bioeliminability (e.g. BOD, BOD to COD ratio, Zahn-Wellens test, biological inhibition potential (e.g. inhibition of activated sludge));
- feasibility of emulsion breaking, e.g. by means of laboratory-scale tests.

**5.2. Emissions to air**

**BAT 53.** In order to reduce emissions of HCl, NH<sub>3</sub> and organic compounds to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Technique		Description
a.	Adsorption	See Section 6.1.
b.	Biofilter	
c.	Thermal oxidation	
d.	Wet scrubbing	

Table 6.10

**BAT-associated emission levels (BAT-AELs) for channelled emissions of HCl and TVOC to air from the treatment of water-based liquid waste**

Parameter	Unit	BAT-AEL <sup>(1)</sup> (Average over the sampling period)
Hydrogen chloride (HCl)	mg/Nm <sup>3</sup>	1-5
TVOC		3-20 <sup>(2)</sup>

<sup>(1)</sup> These BAT-AELs only apply when the substance concerned is identified as relevant in the waste gas stream, based on the inventory mentioned in BAT 3.

<sup>(2)</sup> The upper end of the range is 45 mg/Nm<sup>3</sup> when the emission load is below 0,5 kg/h at the emission point.

The associated monitoring is given in BAT 8.

**6. DESCRIPTION OF TECHNIQUES****6.1. Channelled emissions to air**

Technique	Typical pollutant(s) abated	Description
Adsorption	Mercury, volatile organic compounds, hydrogen sulphide, odorous compounds	Adsorption is a heterogeneous reaction in which gas molecules are retained on a solid or liquid surface that prefers specific compounds to others and thus removes them from effluent streams. When the surface has adsorbed as much as it can, the adsorbent is replaced or the adsorbed content is desorbed as part of the regeneration of the adsorbent. When desorbed, the contaminants are usually at a higher concentration and can either be recovered or disposed of. The most common adsorbent is granular activated carbon.

Technique	Typical pollutant(s) abated	Description
Biofilter	Ammonia, hydrogen sulphide, volatile organic compounds, odorous compounds	<p>The waste gas stream is passed through a bed of organic material (such as peat, heather, compost, root, tree bark, softwood and different combinations) or some inert material (such as clay, activated carbon, and polyurethane), where it is biologically oxidised by naturally occurring microorganisms into carbon dioxide, water, inorganic salts and biomass.</p> <p>A biofilter is designed considering the type(s) of waste input. An appropriate bed material, e.g. in terms of water retention capacity, bulk density, porosity, structural integrity, is selected. Also important are an appropriate height and surface area of the filter bed. The biofilter is connected to a suitable ventilation and air circulation system in order to ensure a uniform air distribution through the bed and a sufficient residence time of the waste gas inside the bed.</p>
Condensation and cryogenic condensation	Volatile organic compounds	<p>Condensation is a technique that eliminates solvent vapours from a waste gas stream by reducing its temperature below its dew point. For cryogenic condensation, the operating temperature can be down to <math>-120\text{ }^{\circ}\text{C}</math>, but in practice it is often between <math>-40\text{ }^{\circ}\text{C}</math> and <math>-80\text{ }^{\circ}\text{C}</math> in the condensation device. Cryogenic condensation can cope with all VOCs and volatile inorganic pollutants, irrespective of their individual vapour pressures. The low temperatures applied allow for very high condensation efficiencies which make it well-suited as a final VOC emission control technique.</p>
Cyclone	Dust	<p>Cyclone filters are used to remove heavier particulates, which 'fall out' as the waste gases are forced into a rotating motion before they leave the separator.</p> <p>Cyclones are used to control particulate material, primarily <math>\text{PM}_{10}</math>.</p>
Electrostatic precipitator (ESP)	Dust	<p>Electrostatic precipitators operate such that particles are charged and separated under the influence of an electrical field. Electrostatic precipitators are capable of operating under a wide range of conditions. In a dry ESP, the collected material is mechanically removed (e.g. by shaking, vibration, compressed air), while in a wet ESP it is flushed with a suitable liquid, usually water.</p>
Fabric filter	Dust	<p>Fabric filters, often referred to as bag filters, are constructed from porous woven or felted fabric through which gases are passed to remove particles. The use of a fabric filter requires the selection of a fabric suitable for the characteristics of the waste gas and the maximum operating temperature.</p>



Technique	Typical pollutant(s) abated	Description
HEPA filter	Dust	HEPA filters (high-efficiency particle air filters) are absolute filters. The filter medium consists of paper or matted glass fibre with a high packing density. The waste gas stream is passed through the filter medium, where particulate matter is collected.
Thermal oxidation	Volatile organic compounds	The oxidation of combustible gases and odorants in a waste gas stream by heating the mixture of contaminants with air or oxygen to above its auto-ignition point in a combustion chamber and maintaining it at a high temperature long enough to complete its combustion to carbon dioxide and water.
Wet scrubbing	Dust, volatile organic compounds, gaseous acidic compounds (alkaline scrubber), gaseous alkaline compounds (acid scrubber)	The removal of gaseous or particulate pollutants from a gas stream via mass transfer to a liquid solvent, often water or an aqueous solution. It may involve a chemical reaction (e.g. in an acid or alkaline scrubber). In some cases, the compounds may be recovered from the solvent.

## 6.2. Diffuse emissions of organic compounds to air

Leak detection and repair (LDAR) programme	Volatile organic compounds	<p>A structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks.</p> <p><b>Sniffing method:</b> The first step is the detection using hand-held organic compound analysers measuring the concentration adjacent to the equipment (e.g. using flame ionisation or photo-ionisation). The second step consists of enclosing the component in an impermeable bag to carry out a direct measurement at the source of the emission. This second step is sometimes replaced by mathematical correlation curves derived from statistical results obtained from a large number of previous measurements made on similar components.</p> <p><b>Optical gas imaging methods:</b> Optical imaging uses small lightweight hand-held cameras which enable the visualisation of gas leaks in real time, so that they appear as 'smoke' on a video recorder together with the normal image of the component concerned, to easily and rapidly locate significant organic compound leaks. Active systems produce an image with a back-scattered infrared laser light reflected on the component and its surroundings. Passive systems are based on the natural infrared radiation of the equipment and its surroundings.</p>
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Measurement of diffuse VOC emissions	Volatile organic compounds	<p>Sniffing and optical gas imaging methods are described under leak detection and repair programme.</p> <p>Full screening and quantification of emissions from the installation can be undertaken with an appropriate combination of complementary methods, e.g. Solar occultation flux (SOF) or Differential absorption LIDAR (DIAL) campaigns. These results can be used for trend evaluation over time, cross-checking and updating/validation of the ongoing LDAR programme.</p> <p><b>Solar occultation flux (SOF):</b> The technique is based on the recording and spectrometric Fourier Transform analysis of a broadband infrared or ultraviolet/visible sunlight spectrum along a given geographical itinerary, crossing the wind direction and cutting through VOC plumes.</p> <p><b>Differential absorption LIDAR (DIAL):</b> This is a laser-based technique using differential absorption LIDAR (light detection and ranging), which is the optical analogue of radio wave-based RADAR. The technique relies on the backscattering of laser beam pulses by atmospheric aerosols, and the analysis of the spectral properties of the returned light collected with a telescope.</p>
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### 6.3. Emissions to water

Technique	Typical pollutant(s) targeted	Description
Activated sludge process	Biodegradable organic compounds	<p>The biological oxidation of dissolved organic pollutants with oxygen using the metabolism of microorganisms. In the presence of dissolved oxygen (injected as air or pure oxygen), the organic components are transformed into carbon dioxide, water or other metabolites and biomass (i.e. the activated sludge). The microorganisms are maintained in suspension in the waste water and the whole mixture is mechanically aerated. The activated sludge mixture is sent to a separation facility from where the sludge is recycled to the aeration tank.</p>
Adsorption	Adsorbable dissolved non-biodegradable or inhibitory pollutants, e.g. hydrocarbons, mercury, AOX	<p>Separation method in which compounds (i.e. pollutants) in a fluid (i.e. waste water) are retained on a solid surface (typically activated carbon).</p>

Technique	Typical pollutant(s) targeted	Description
Chemical oxidation	Oxidisable dissolved non-biodegradable or inhibitory pollutants, e.g. nitrite, cyanide	Organic compounds are oxidised to less harmful and more easily biodegradable compounds. Techniques include wet oxidation or oxidation with ozone or hydrogen peroxide, optionally supported by catalysts or UV radiation. Chemical oxidation is also used to degrade organic compounds causing odour, taste and colour and for disinfection purposes.
Chemical reduction	Reducible dissolved non-biodegradable or inhibitory pollutants, e.g. hexavalent chromium (Cr(VI))	Chemical reduction is the conversion of pollutants by chemical reducing agents into similar but less harmful or hazardous compounds.
Coagulation and flocculation	Suspended solids and particulate-bound metals	Coagulation and flocculation are used to separate suspended solids from waste water and are often carried out in successive steps. Coagulation is carried out by adding coagulants with charges opposite to those of the suspended solids. Flocculation is carried out by adding polymers, so that collisions of microfloc particles cause them to bond to produce larger flocs. The flocs formed are subsequently separated by sedimentation, air flotation or filtration.
Distillation/rectification	Dissolved non-biodegradable or inhibitory pollutants that can be distilled, e.g. some solvents	Distillation is a technique to separate compounds with different boiling points by partial evaporation and recondensation. Waste water distillation is the removal of low-boiling contaminants from waste water by transferring them into the vapour phase. Distillation is carried out in columns, equipped with plates or packing material, and a downstream condenser.
Equalisation	All pollutants	Balancing of flows and pollutant loads by using tanks or other management techniques.
Evaporation	Soluble pollutants	The use of distillation (see above) to concentrate aqueous solutions of high-boiling substances for further use, processing or disposal (e.g. waste water incineration) by transferring water to the vapour phase. It is typically carried out in multi-stage units with increasing vacuum, to reduce the energy demand. The water vapours are condensed, to be reused or discharged as waste water.

Technique	Typical pollutant(s) targeted	Description
Filtration		The separation of solids from waste water by passing them through a porous medium, e.g. sand filtration, microfiltration and ultrafiltration.
Flotation	Suspended solids and particulate-bound metals	The separation of solid or liquid particles from waste water by attaching them to fine gas bubbles, usually air. The buoyant particles accumulate at the water surface and are collected with skimmers.
Ion exchange	Ionic dissolved non-biodegradable or inhibitory pollutants, e.g. metals	The retention of undesired or hazardous ionic constituents of waste water and their replacement by more acceptable ions using an ion exchange resin. The pollutants are temporarily retained and afterwards released into a regeneration or backwashing liquid.
Membrane bioreactor	Biodegradable organic compounds	A combination of activated sludge treatment and membrane filtration. Two variants are used: a) an external recirculation loop between the activated sludge tank and the membrane module; and b) immersion of the membrane module in the aerated activated sludge tank, where the effluent is filtered through a hollow fibre membrane, the biomass remaining in the tank.
Membrane filtration	Suspended solids and particulate-bound metals	Microfiltration (MF) and ultrafiltration (UF) are membrane filtration processes that retain and concentrate, on one side of the membrane, pollutants such as suspended particles and colloidal particles contained in waste waters.
Neutralisation	Acids, alkalis	The adjustment of the pH of waste water to a neutral level (approximately 7) by the addition of chemicals. Sodium hydroxide (NaOH) or calcium hydroxide (Ca(OH) <sub>2</sub> ) may be used to increase the pH, whereas sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ), hydrochloric acid (HCl) or carbon dioxide (CO <sub>2</sub> ) may be used to decrease the pH. The precipitation of some pollutants may occur during neutralisation.
Nitrification/denitrification	Total nitrogen, ammonia	A two-step process that is typically incorporated into biological waste water treatment plants. The first step is aerobic nitrification where microorganisms oxidise ammonium (NH <sub>4</sub> <sup>+</sup> ) to the intermediate nitrite (NO <sub>2</sub> <sup>-</sup> ), which is then further oxidised to nitrate (NO <sub>3</sub> <sup>-</sup> ). In the subsequent anoxic denitrification step, microorganisms chemically reduce nitrate to nitrogen gas.

Technique	Typical pollutant(s) targeted	Description
Oil-water separation	Oil/grease	The separation of oil and water and subsequent oil removal by gravity separation of free oil, using separation equipment or emulsion breaking (using emulsion breaking chemicals such as metal salts, mineral acids, adsorbents and organic polymers).
Sedimentation	Suspended solids and particulate-bound metals	The separation of suspended particles by gravitational settling.
Precipitation	Precipitable dissolved non-biodegradable or inhibitory pollutants, e.g. metals, phosphorus	The conversion of dissolved pollutants into insoluble compounds by adding precipitants. The solid precipitates formed are subsequently separated by sedimentation, air flotation or filtration.
Stripping	Purgeable pollutants, e.g. hydrogen sulphide (H <sub>2</sub> S), ammonia (NH <sub>3</sub> ), some adsorbable organically bound halogens (AOX), hydrocarbons	The removal of purgeable pollutants from the aqueous phase by a gaseous phase (e.g. steam, nitrogen or air) that is passed through the liquid. They are subsequently recovered (e.g. by condensation) for further use or disposal. The removal efficiency may be enhanced by increasing the temperature or reducing the pressure.

#### 6.4. Sorting techniques

Technique	Description
Air classification	Air classification (or air separation, or aeraulic separation) is a process of approximate sizing of dry mixtures of different particle sizes into groups or grades at cut points ranging from 10 mesh to sub-mesh sizes. Air classifiers (also called windsifters) complement screens in applications requiring cut points below commercial screen sizes, and supplement sieves and screens for coarser cuts where the special advantages of air classification warrant it.
All-metal separator	Metals (ferrous and non-ferrous) are sorted by means of a detection coil, in which the magnetic field is influenced by metal particles, linked to a processor that controls the air jet for ejecting the materials that have been detected.
Electromagnetic separation of non-ferrous metals	Non-ferrous metals are sorted by means of eddy current separators. An eddy current is induced by a series of rare earth magnetic or ceramic rotors at the head of a conveyor that spins at high speed independently of the conveyor. This process induces temporary magnetic forces in non-magnetic metals of the same polarity as the rotor, causing the metals to be repelled away and then separated from the other feedstock.

Technique	Description
Manual separation	Material is manually separated by means of visual examination by staff on a picking line or on the floor, either to selectively remove a target material from a general waste stream or to remove contamination from an output stream to increase purity. This technique generally targets recyclables (glass, plastic, etc.) and any contaminants, hazardous materials and oversized materials such as WEEE.
Magnetic separation	Ferrous metals are sorted by means of a magnet which attracts ferrous metal materials. This can be carried out, for example, by an overband magnetic separator or a magnetic drum.
Near-infrared spectroscopy (NIRS)	Materials are sorted by means of a near-infrared sensor which scans the whole width of the belt conveyor and transmits the characteristic spectra of the different materials to a data processor which controls an air jet for ejecting the materials that have been detected. Generally NIRS is not suitable for sorting black materials.
Sink-float tanks	Solid materials are separated into two flows by exploiting the different material densities.
Size separation	Materials are sorted according to their particle size. This can be carried out by drum screens, linear and circular oscillating screens, flip-flop screens, flat screens, tumbler screens and moving grates.
Vibration table	Materials are separated according to their density and size, moving (in slurry in the case of wet tables or wet density separators) across an inclined table, which oscillates backwards and forwards.
X-ray systems	Material composites are sorted according to various material densities, halogen components, or organic components, with the aid of X-rays. The characteristics of the different materials are transmitted to a data processor which controls an air jet for ejecting the materials that have been detected.

#### 6.5. Management techniques

Accident management plan	The accident management plan is part of the EMS (see BAT 1) and identifies hazards posed by the plant and the associated risks and defines measures to address these risks. It considers the inventory of pollutants present or likely to be present which could have environmental consequences if they escape.
Residues management plan	A residues management plan is part of the EMS (see BAT 1) and is a set of measures aiming to (1) minimise the generation of residues arising from the treatment of waste; (2) optimise the reuse, regeneration, recycling and/or recovery of energy of the residues, and (3) ensure the proper disposal of residues.

## DIRECTIVES

**DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL****of 24 November 2010****on industrial emissions (integrated pollution prevention and control)****(Recast)****(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Economic and Social Committee <sup>(1)</sup>,

Having regard to the opinion of the Committee of the Regions <sup>(2)</sup>,

Acting in accordance with the ordinary legislative procedure <sup>(3)</sup>,

Whereas:

(1) A number of substantial changes are to be made to Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry <sup>(4)</sup>, Council Directive 82/883/EEC of 3 December 1982 on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry <sup>(5)</sup>, Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry <sup>(6)</sup>, Council Directive 1999/13/EC of 11 March 1999 on the limitation of

emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations <sup>(7)</sup>, Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste <sup>(8)</sup>, Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants <sup>(9)</sup> and Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control <sup>(10)</sup>. In the interests of clarity, those Directives should be recast.

(2) In order to prevent, reduce and as far as possible eliminate pollution arising from industrial activities in compliance with the 'polluter pays' principle and the principle of pollution prevention, it is necessary to establish a general framework for the control of the main industrial activities, giving priority to intervention at source, ensuring prudent management of natural resources and taking into account, when necessary, the economic situation and specific local characteristics of the place in which the industrial activity is taking place.

(3) Different approaches to controlling emissions into air, water or soil separately may encourage the shifting of pollution from one environmental medium to another rather than protecting the environment as a whole. It is, therefore, appropriate to provide for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention. Such an approach will also contribute to the achievement of a level playing field in the Union by aligning environmental performance requirements for industrial installations.

<sup>(1)</sup> OJ C 182, 4.8.2009, p. 46.

<sup>(2)</sup> OJ C 325, 19.12.2008, p. 60.

<sup>(3)</sup> Position of the European Parliament of 10 March 2009 (OJ C 87 E, 1.4.2010, p. 191) and position of the Council at first reading of 15 February 2010 (OJ C 107 E, 27.4.2010, p. 1). Position of the European Parliament of 7 July 2010 (not yet published in the Official Journal) and decision of the Council of 8 November 2010.

<sup>(4)</sup> OJ L 54, 25.2.1978, p. 19.

<sup>(5)</sup> OJ L 378, 31.12.1982, p. 1.

<sup>(6)</sup> OJ L 409, 31.12.1992, p. 11.

<sup>(7)</sup> OJ L 85, 29.3.1999, p. 1.

<sup>(8)</sup> OJ L 332, 28.12.2000, p. 91.

<sup>(9)</sup> OJ L 309, 27.11.2001, p. 1.

<sup>(10)</sup> OJ L 24, 29.1.2008, p. 8.

- (4) It is appropriate to revise the legislation relating to industrial installations in order to simplify and clarify the existing provisions, reduce unnecessary administrative burden and implement the conclusions of the Commission Communications of 21 September 2005 on the Thematic Strategy on Air Pollution (hereinafter the Thematic Strategy on Air Pollution), of 22 September 2006 on the Thematic Strategy for Soil Protection and of 21 December 2005 on the Thematic Strategy on the Prevention and Recycling of Waste adopted as a follow-up to Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme <sup>(1)</sup>. Those Communications set objectives to protect human health and the environment which cannot be met without further reductions in emissions arising from industrial activities.
- (5) In order to ensure the prevention and control of pollution, each installation should operate only if it holds a permit or, in the case of certain installations and activities using organic solvents, only if it holds a permit or is registered.
- (6) It is for Member States to determine the approach for assigning responsibilities to operators of installations provided that compliance with this Directive is ensured. Member States may choose to grant a permit to one responsible operator for each installation or to specify the responsibility amongst several operators of different parts of an installation. Where its current legal system provides for only one responsible operator for each installation, a Member State may decide to retain this system.
- (7) In order to facilitate the granting of permits, Member States should be able to set requirements for certain categories of installations in general binding rules.
- (8) It is important to prevent accidents and incidents and limit their consequences. Liability regarding the environmental consequences of accidents and incidents is a matter for relevant national law and, where applicable, other relevant Union law.
- (9) In order to avoid duplication of regulation, the permit for an installation covered by Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community <sup>(2)</sup> should not include an emission limit value for direct emissions of the greenhouse gases specified in Annex I to that Directive except where it is necessary to ensure that no significant local pollution is caused or where an installation is excluded from that scheme.
- (10) In accordance with Article 193 of the Treaty on the Functioning of the European Union (TFEU), this Directive does not prevent Member States from maintaining or introducing more stringent protective measures, for example greenhouse gas emission requirements, provided that such measures are compatible with the Treaties and the Commission has been notified.
- (11) Operators should submit permit applications containing the information necessary for the competent authority to set permit conditions. Operators should be able to use information resulting from the application of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment <sup>(3)</sup> and of Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances <sup>(4)</sup> when submitting permit applications.
- (12) The permit should include all the measures necessary to achieve a high level of protection of the environment as a whole and to ensure that the installation is operated in accordance with the general principles governing the basic obligations of the operator. The permit should also include emission limit values for polluting substances, or equivalent parameters or technical measures, appropriate requirements to protect the soil and groundwater and monitoring requirements. Permit conditions should be set on the basis of best available techniques.
- (13) In order to determine best available techniques and to limit imbalances in the Union as regards the level of emissions from industrial activities, reference documents for best available techniques (hereinafter BAT reference documents) should be drawn up, reviewed and, where necessary, updated through an exchange of information with stakeholders and the key elements of BAT reference documents (hereinafter BAT conclusions) adopted through committee procedure. In this respect, the Commission should, through committee procedure, establish guidance on the collection of data, on the elaboration of BAT reference documents and on their quality assurance. BAT conclusions should be the reference for setting permit conditions. They can be supplemented by other sources. The Commission should aim to update BAT reference documents not later than 8 years after the publication of the previous version.

<sup>(1)</sup> OJ L 242, 10.9.2002, p. 1.

<sup>(2)</sup> OJ L 275, 25.10.2003, p. 32.

<sup>(3)</sup> OJ L 175, 5.7.1985, p. 40.

<sup>(4)</sup> OJ L 10, 14.1.1997, p. 13.



- (14) In order to ensure an effective and active exchange of information resulting in high-quality BAT reference documents, the Commission should establish a forum that functions in a transparent manner. Practical arrangements for the exchange of information and the accessibility of BAT reference documents should be laid down, in particular to ensure that Member States and stakeholders provide data of sufficient quality and quantity based on established guidance to enable the determination of best available techniques and emerging techniques.
- (15) It is important to provide sufficient flexibility to competent authorities to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques. To this end, the competent authority may set emission limits that differ from the emission levels associated with the best available techniques in terms of the values, periods of time and reference conditions applied, so long as it can be demonstrated, through the results of emission monitoring, that emissions have not exceeded the emission levels associated with the best available techniques. Compliance with the emission limit values that are set in permits results in emissions below those emission limit values.
- (16) In order to take into account certain specific circumstances where the application of emission levels associated with the best available techniques would lead to disproportionately high costs compared to the environmental benefits, competent authorities should be able to set emission limit values deviating from those levels. Such deviations should be based on an assessment taking into account well-defined criteria. The emission limit values set out in this Directive should not be exceeded. In any event, no significant pollution should be caused and a high level of protection of the environment taken as a whole should be achieved.
- (17) In order to enable operators to test emerging techniques which could provide for a higher general level of environmental protection, or at least the same level of environmental protection and higher cost savings than existing best available techniques, the competent authority should be able to grant temporary derogations from emission levels associated with the best available techniques.
- (18) Changes to an installation may give rise to higher levels of pollution. Operators should notify the competent authority of any planned change which might affect the environment. Substantial changes to installations which may have significant negative effects on human health or the environment should not be made without a permit granted in accordance with this Directive.
- (19) The spreading of manure contributes significantly to emissions of pollutants into air and water. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and Union law on water protection, it is necessary for the Commission to review the need to establish the most suitable controls of these emissions through the application of best available techniques.
- (20) The intensive rearing of poultry and cattle contributes significantly to emissions of pollutants into air and water. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and in Union law on water protection, it is necessary for the Commission to review the need to establish differentiated capacity thresholds for different poultry species in order to define the scope of this Directive and to review the need to establish the most suitable controls on emissions from cattle rearing installations.
- (21) In order to take account of developments in best available techniques or other changes to an installation, permit conditions should be reconsidered regularly and, where necessary, updated, in particular where new or updated BAT conclusions are adopted.
- (22) In specific cases where permit reconsideration and updating identifies that a longer period than 4 years after the publication of a decision on BAT conclusions might be needed to introduce new best available techniques, competent authorities may set a longer time period in permit conditions where this is justified on the basis of the criteria laid down in this Directive.
- (23) It is necessary to ensure that the operation of an installation does not lead to a deterioration of the quality of soil and groundwater. Permit conditions should, therefore, include appropriate measures to prevent emissions to soil and groundwater and regular surveillance of those measures to avoid leaks, spills, incidents or accidents occurring during the use of equipment and during storage. In order to detect possible soil and groundwater pollution at an early stage and, therefore, to take appropriate corrective measures before the pollution spreads, the monitoring of soil and groundwater for relevant hazardous substances is also necessary. When determining the frequency of monitoring, the type of prevention measures and the extent and occurrence of their surveillance may be considered.

- (24) In order to ensure that the operation of an installation does not deteriorate the quality of soil and groundwater, it is necessary to establish, through a baseline report, the state of soil and groundwater contamination. The baseline report should be a practical tool that permits, as far as possible, a quantified comparison between the state of the site described in that report and the state of the site upon definitive cessation of activities, in order to ascertain whether a significant increase in pollution of soil or groundwater has taken place. The baseline report should, therefore, contain information making use of existing data on soil and groundwater measurements and historical data related to past uses of the site.
- (25) In accordance with the polluter pays principle, when assessing the level of significance of the pollution of soil and groundwater caused by the operator which would trigger the obligation to return the site to the state described in the baseline report, Member States should take into account the permit conditions that have applied over the lifetime of the activity concerned, the pollution prevention measures adopted for the installation, and the relative increase in pollution compared to the contamination load identified in the baseline report. Liability regarding pollution not caused by the operator is a matter for relevant national law and, where applicable, other relevant Union law.
- (26) In order to ensure the effective implementation and enforcement of this Directive, operators should regularly report to the competent authority on compliance with permit conditions. Member States should ensure that the operator and the competent authority each take necessary measures in the event of non-compliance with this Directive and provide for a system of environmental inspections. Member States should ensure that sufficient staff are available with the skills and qualifications needed to carry out those inspections effectively.
- (27) In accordance with the Århus Convention on access to information, public participation in decision-making and access to justice in environmental matters<sup>(1)</sup>, effective public participation in decision-making is necessary to enable the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken. Members of the public concerned should have access to justice in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.
- (28) The combustion of fuel in installations with a total rated thermal input below 50 MW contributes significantly to emissions of pollutants into the air. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution, it is necessary for the Commission to review the need to establish the most suitable controls on emissions from such installations. That review should take into account the specificities of combustion plants used in healthcare facilities, in particular with regard to their exceptional use in the case of emergencies.
- (29) Large combustion plants contribute greatly to emissions of polluting substances into the air resulting in a significant impact on human health and the environment. In order to reduce that impact and to work towards meeting the requirements of Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants<sup>(2)</sup> and the objectives set out in the Thematic Strategy on Air Pollution, it is necessary to set more stringent emission limit values at Union level for certain categories of combustion plants and pollutants.
- (30) The Commission should review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V for certain large combustion plants, taking into account the review and update of the relevant BAT reference documents. In this context, the Commission should consider the specificity of the energy systems of refineries.
- (31) Due to the characteristics of certain indigenous solid fuels, it is appropriate to apply minimum desulphurisation rates rather than emission limit values for sulphur dioxide for combustion plants firing such fuels. Moreover, as the specific characteristics of oil shale may not allow the application of the same sulphur abatement techniques or the achievement of the same desulphurisation efficiency as for other fuels, a slightly lower minimum desulphurisation rate for plants using this fuel is appropriate.
- (32) In the case of a sudden interruption in the supply of low-sulphur fuel or gas resulting from a serious shortage, the competent authority should be able to grant temporary derogations to allow emissions of the combustion plants concerned to exceed the emission limit values set out in this Directive.

<sup>(1)</sup> OJ L 124, 17.5.2005, p. 4.

<sup>(2)</sup> OJ L 309, 27.11.2001, p. 22.

- (33) The operator concerned should not operate a combustion plant for more than 24 hours after malfunctioning or breakdown of abatement equipment and unabated operation should not exceed 120 hours in a 12-month period in order to limit the negative effects of pollution on the environment. However, where there is an overriding need for energy supplies or it is necessary to avoid an overall increase of emissions resulting from the operation of another combustion plant, competent authorities should be able to grant a derogation from those time limits.
- (34) In order to ensure a high level of environmental and human health protection and to avoid transboundary movements of waste to plants operating at lower environmental standards, it is necessary to set and maintain stringent operating conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Union.
- (35) The use of organic solvents in certain activities and installations gives rise to emissions of organic compounds into the air which contribute to the local and transboundary formation of photochemical oxidants which causes damage to natural resources and has harmful effects on human health. It is, therefore, necessary to take preventive action against the use of organic solvents and to establish a requirement to comply with emission limit values for organic compounds and appropriate operating conditions. Operators should be allowed to comply with the requirements of a reduction scheme instead of complying with the emission limit values set out in this Directive where other measures, such as the use of low-solvent or solvent-free products or techniques, provide alternative means of achieving equivalent emission reduction.
- (36) Installations producing titanium dioxide can give rise to significant pollution into air and water. In order to reduce these impacts, it is necessary to set at Union level more stringent emission limit values for certain polluting substances.
- (37) With regard to the inclusion in the scope of national laws, regulations and administrative provisions brought into force in order to comply with this Directive of installations for the manufacturing of ceramic products by firings, on the basis of the characteristics of the national industrial sector, and in order to grant clear interpretation of the scope, Member States should decide whether to apply both the criteria, production capacity and kiln capacity, or just one of the two criteria.
- (38) In order to simplify reporting and reduce unnecessary administrative burden, the Commission should identify methods to streamline the way in which data are made available pursuant to this Directive with the other requirements of Union law, and in particular Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register <sup>(1)</sup>.
- (39) In order to ensure uniform conditions for implementation, implementing powers should be conferred on the Commission to adopt guidance on the collection of data, on the drawing up of BAT reference documents and on their quality assurance, including the suitability of their content and format, to adopt decisions on BAT conclusions, to establish detailed rules on the determination of start-up and shut-down periods and for transitional national plans for large combustion plants, and to establish the type, format and frequency of information that Member States are to make available to the Commission. In accordance with Article 291 TFEU, rules and general principles concerning mechanisms for the control by Member States of the Commission's exercise of implementing powers are to be laid down in advance by a regulation adopted in accordance with the ordinary legislative procedure. Pending the adoption of that new regulation, Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission <sup>(2)</sup> continues to apply, with the exception of the regulatory procedure with scrutiny, which is not applicable.
- (40) The Commission should be empowered to adopt delegated acts in accordance with Article 290 TFEU in respect of the setting of the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out, and the adaptation of certain parts of Annexes V, VI and VII to scientific and technical progress. In the case of waste incineration plants and waste co-incineration plants, this may include, inter alia, the establishment of criteria to allow derogations from continuous monitoring of total dust emissions. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level.
- (41) In order to address significant environmental pollution, for example from heavy metals and dioxins and furans, the Commission should, based on an assessment of the implementation of the best available techniques by certain activities or of the impact of those activities on the environment as a whole, present proposals for Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance.
- (42) Member States should lay down rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

<sup>(1)</sup> OJ L 33, 4.2.2006, p. 1.

<sup>(2)</sup> OJ L 184, 17.7.1999, p. 23.

(43) In order to provide existing installations with sufficient time to adapt technically to the new requirements of this Directive, some of the new requirements should apply to those installations after a fixed period from the date of application of this Directive. Combustion plants need sufficient time to install the necessary abatement measures to meet the emission limit values set out in Annex V.

(44) Since the objectives of this Directive, namely to ensure a high level of environmental protection and the improvement of environmental quality, cannot be sufficiently achieved by Member States and can, therefore, by reason of the transboundary nature of pollution from industrial activities, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(45) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. In particular, this Directive seeks to promote the application of Article 37 of that Charter.

(46) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive change as compared with the earlier Directives. The obligation to transpose the provisions which are unchanged arises under the earlier Directives.

(47) In accordance with paragraph 34 of the Interinstitutional agreement on better law-making<sup>(1)</sup>, Member States are encouraged to draw up, for themselves and in the interests of the Union, their own tables, which will as far as possible, illustrate the correlation between this Directive and the transposition measures, and to make those tables public.

(48) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law and application of the Directives set out in Annex IX, Part B,

HAVE ADOPTED THIS DIRECTIVE:

#### CHAPTER I

#### COMMON PROVISIONS

##### Article 1

##### Subject matter

This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities.

<sup>(1)</sup> OJ C 321, 31.12.2003, p. 1.

It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.

##### Article 2

##### Scope

1. This Directive shall apply to the industrial activities giving rise to pollution referred to in Chapters II to VI.

2. This Directive shall not apply to research activities, development activities or the testing of new products and processes.

##### Article 3

##### Definitions

For the purposes of this Directive the following definitions shall apply:

(1) 'substance' means any chemical element and its compounds, with the exception of the following substances:

(a) radioactive substances as defined in Article 1 of Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation<sup>(2)</sup>;

(b) genetically modified micro-organisms as defined in Article 2(b) of Directive 2009/41/EC of the European Parliament and the Council of 6 May 2009 on the contained use of genetically modified micro-organisms<sup>(3)</sup>;

(c) genetically modified organisms as defined in point 2 of Article 2 of Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms<sup>(4)</sup>;

(2) 'pollution' means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment;

<sup>(2)</sup> OJ L 159, 29.6.1996, p. 1.

<sup>(3)</sup> OJ L 125, 21.5.2009, p. 75.

<sup>(4)</sup> OJ L 106, 17.4.2001, p. 1.

- (3) 'installation' means a stationary technical unit within which one or more activities listed in Annex I or in Part 1 of Annex VII are carried out, and any other directly associated activities on the same site which have a technical connection with the activities listed in those Annexes and which could have an effect on emissions and pollution;
- (4) 'emission' means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into air, water or land;
- (5) 'emission limit value' means the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time;
- (6) 'environmental quality standard' means the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Union law;
- (7) 'permit' means a written authorisation to operate all or part of an installation or combustion plant, waste incineration plant or waste co-incineration plant;
- (8) 'general binding rules' means emission limit values or other conditions, at least at sector level, that are adopted with the intention of being used directly to set permit conditions;
- (9) 'substantial change' means a change in the nature or functioning, or an extension, of an installation or combustion plant, waste incineration plant or waste co-incineration plant which may have significant negative effects on human health or the environment;
- (10) 'best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:
- (a) 'techniques' includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- (b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;
- (c) 'best' means most effective in achieving a high general level of protection of the environment as a whole;
- (11) 'BAT reference document' means a document, resulting from the exchange of information organised pursuant to Article 13, drawn up for defined activities and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques, giving special consideration to the criteria listed in Annex III;
- (12) 'BAT conclusions' means a document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures;
- (13) 'emission levels associated with the best available techniques' means the range of emission levels obtained under normal operating conditions using a best available technique or a combination of best available techniques, as described in BAT conclusions, expressed as an average over a given period of time, under specified reference conditions;
- (14) 'emerging technique' means a novel technique for an industrial activity that, if commercially developed, could provide either a higher general level of protection of the environment or at least the same level of protection of the environment and higher cost savings than existing best available techniques;
- (15) 'operator' means any natural or legal person who operates or controls in whole or in part the installation or combustion plant, waste incineration plant or waste co-incineration plant or, where this is provided for in national law, to whom decisive economic power over the technical functioning of the installation or plant has been delegated;
- (16) 'the public' means one or more natural or legal persons and, in accordance with national law or practice, their associations, organisations or groups;
- (17) 'the public concerned' means the public affected or likely to be affected by, or having an interest in, the taking of a decision on the granting or the updating of a permit or of permit conditions; for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest;

- (18) 'hazardous substances' means substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures <sup>(1)</sup>;
- (19) 'baseline report' means information on the state of soil and groundwater contamination by relevant hazardous substances;
- (20) 'groundwater' means groundwater as defined in point 2 of Article 2 of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy <sup>(2)</sup>;
- (21) 'soil' means the top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms;
- (22) 'environmental inspection' means all actions, including site visits, monitoring of emissions and checks of internal reports and follow-up documents, verification of self-monitoring, checking of the techniques used and adequacy of the environment management of the installation, undertaken by or on behalf of the competent authority to check and promote compliance of installations with their permit conditions and, where necessary, to monitor their environmental impact;
- (23) 'poultry' means poultry as defined in point 1 of Article 2 of Council Directive 90/539/EEC of 15 October 1990 on animal health conditions governing intra-Community trade in, and imports from third countries of, poultry and hatching eggs <sup>(3)</sup>;
- (24) 'fuel' means any solid, liquid or gaseous combustible material;
- (25) 'combustion plant' means any technical apparatus in which fuels are oxidised in order to use the heat thus generated;
- (26) 'stack' means a structure containing one or more flues providing a passage for waste gases in order to discharge them into the air;
- (27) 'operating hours' means the time, expressed in hours, during which a combustion plant, in whole or in part, is operating and discharging emissions into the air, excluding start-up and shut-down periods;
- (28) 'rate of desulphurisation' means the ratio over a given period of time of the quantity of sulphur which is not emitted into air by a combustion plant to the quantity of sulphur contained in the solid fuel which is introduced into the combustion plant facilities and which is used in the plant over the same period of time;
- (29) 'indigenous solid fuel' means a naturally occurring solid fuel fired in a combustion plant specifically designed for that fuel and extracted locally;
- (30) 'determinative fuel' means the fuel which, amongst all fuels used in a multi-fuel firing combustion plant using the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, has the highest emission limit value as set out in Part 1 of Annex V, or, in the case of several fuels having the same emission limit value, the fuel having the highest thermal input amongst those fuels;
- (31) 'biomass' means any of the following:
- (a) products consisting of any vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content;
  - (b) the following waste:
    - (i) vegetable waste from agriculture and forestry;
    - (ii) vegetable waste from the food processing industry, if the heat generated is recovered;
    - (iii) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;
    - (iv) cork waste;
    - (v) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating and which includes, in particular, such wood waste originating from construction and demolition waste;
- (32) 'multi-fuel firing combustion plant' means any combustion plant which may be fired simultaneously or alternately by two or more types of fuel;
- (33) 'gas turbine' means any rotating machine which converts thermal energy into mechanical work, consisting mainly of a compressor, a thermal device in which fuel is oxidised in order to heat the working fluid, and a turbine;
- (34) 'gas engine' means an internal combustion engine which operates according to the Otto cycle and uses spark ignition or, in case of dual fuel engines, compression ignition to burn fuel;

<sup>(1)</sup> OJ L 353, 31.12.2008, p. 1.

<sup>(2)</sup> OJ L 327, 22.12.2000, p. 1.

<sup>(3)</sup> OJ L 303, 31.10.1990, p. 6.

- (35) 'diesel engine' means an internal combustion engine which operates according to the diesel cycle and uses compression ignition to burn fuel;
- (36) 'small isolated system' means a small isolated system as defined in point 26 of Article 2 of Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity <sup>(1)</sup>;
- (37) 'waste' means waste as defined in point 1 of Article 3 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste <sup>(2)</sup>;
- (38) 'hazardous waste' means hazardous waste as defined in point 2 of Article 3 of Directive 2008/98/EC;
- (39) 'mixed municipal waste' means waste from households as well as commercial, industrial and institutional waste which, because of its nature and composition, is similar to waste from households, but excluding fractions indicated under heading 20 01 of the Annex to Decision 2000/532/EC <sup>(3)</sup> that are collected separately at source and excluding the other waste indicated under heading 20 02 of that Annex;
- (40) 'waste incineration plant' means any stationary or mobile technical unit and equipment dedicated to the thermal treatment of waste, with or without recovery of the combustion heat generated, through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;
- (41) 'waste co-incineration plant' means any stationary or mobile technical unit whose main purpose is the generation of energy or production of material products and which uses waste as a regular or additional fuel or in which waste is thermally treated for the purpose of disposal through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;
- (42) 'nominal capacity' means the sum of the incineration capacities of the furnaces of which a waste incineration plant or a waste co-incineration plant is composed, as specified by the constructor and confirmed by the operator, with due account being taken of the calorific value of the waste, expressed as the quantity of waste incinerated per hour;
- (43) 'dioxins and furans' means all polychlorinated dibenzo-p-dioxins and dibenzofurans listed in Part 2 of Annex VI;
- (44) 'organic compound' means any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates;
- (45) 'volatile organic compound' means any organic compound as well as the fraction of creosote, having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use;
- (46) 'organic solvent' means any volatile organic compound which is used for any of the following:
- alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials;
  - as a cleaning agent to dissolve contaminants;
  - as a dissolver;
  - as a dispersion medium;
  - as a viscosity adjuster;
  - as a surface tension adjuster;
  - as a plasticiser;
  - as a preservative;
- (47) 'coating' means coating as defined in point 8 of Article 2 of Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products <sup>(4)</sup>.

#### Article 4

#### Obligation to hold a permit

- Member States shall take the necessary measures to ensure that no installation or combustion plant, waste incineration plant or waste co-incineration plant is operated without a permit.

By way of derogation from the first subparagraph, Member States may set a procedure for the registration of installations covered only by Chapter V.

The procedure for registration shall be specified in a binding act and include at least a notification to the competent authority by the operator of the intention to operate an installation.

<sup>(1)</sup> OJ L 176, 15.7.2003, p. 37.

<sup>(2)</sup> OJ L 312, 22.11.2008, p. 3.

<sup>(3)</sup> Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (OJ L 226, 6.9.2000, p. 3).

<sup>(4)</sup> OJ L 143, 30.4.2004, p. 87.

2. Member States may opt to provide that a permit cover two or more installations or parts of installations operated by the same operator on the same site.

Where a permit covers two or more installations, it shall contain conditions to ensure that each installation complies with the requirements of this Directive.

3. Member States may opt to provide that a permit cover several parts of an installation operated by different operators. In such cases, the permit shall specify the responsibilities of each operator.

#### Article 5

##### Granting of a permit

1. Without prejudice to other requirements laid down in national or Union law, the competent authority shall grant a permit if the installation complies with the requirements of this Directive.

2. Member States shall take the measures necessary to ensure that the conditions of, and the procedures for the granting of, the permit are fully coordinated where more than one competent authority or more than one operator is involved or more than one permit is granted, in order to guarantee an effective integrated approach by all authorities competent for this procedure.

3. In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EEC applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6, 7 and 9 of that Directive shall be examined and used for the purposes of granting the permit.

#### Article 6

##### General binding rules

Without prejudice to the obligation to hold a permit, Member States may include requirements for certain categories of installations, combustion plants, waste incineration plants or waste co-incineration plants in general binding rules.

Where general binding rules are adopted, the permit may simply include a reference to such rules.

#### Article 7

##### Incidents and accidents

Without prejudice to Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage <sup>(1)</sup>, in the event of any incident or accident significantly affecting the environment, Member States shall take the necessary measures to ensure that:

<sup>(1)</sup> OJ L 143, 30.4.2004, p. 56.

- (a) the operator informs the competent authority immediately;
- (b) the operator immediately takes the measures to limit the environmental consequences and to prevent further possible incidents or accidents;
- (c) the competent authority requires the operator to take any appropriate complementary measures that the competent authority considers necessary to limit the environmental consequences and to prevent further possible incidents or accidents.

#### Article 8

##### Non-compliance

1. Member States shall take the necessary measures to ensure that the permit conditions are complied with.

2. In the event of a breach of the permit conditions, Member States shall ensure that:

- (a) the operator immediately informs the competent authority;
- (b) the operator immediately takes the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) the competent authority requires the operator to take any appropriate complementary measures that the competent authority considers necessary to restore compliance.

Where the breach of the permit conditions poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment, and until compliance is restored in accordance with points (b) and (c) of the first subparagraph, the operation of the installation, combustion plant, waste incineration plant, waste co-incineration plant or relevant part thereof shall be suspended.

#### Article 9

##### Emission of greenhouse gases

1. Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas, unless necessary to ensure that no significant local pollution is caused.

2. For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.



3. Where necessary, the competent authorities shall amend the permit as appropriate.

4. Paragraphs 1 to 3 shall not apply to installations which are temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Union in accordance with Article 27 of Directive 2003/87/EC.

## CHAPTER II

### PROVISIONS FOR ACTIVITIES LISTED IN ANNEX I

#### Article 10

##### Scope

This Chapter shall apply to the activities set out in Annex I and, where applicable, reaching the capacity thresholds set out in that Annex.

#### Article 11

##### General principles governing the basic obligations of the operator

Member States shall take the necessary measures to provide that installations are operated in accordance with the following principles:

- (a) all the appropriate preventive measures are taken against pollution;
- (b) the best available techniques are applied;
- (c) no significant pollution is caused;
- (d) the generation of waste is prevented in accordance with Directive 2008/98/EC;
- (e) where waste is generated, it is, in order of priority and in accordance with Directive 2008/98/EC, prepared for re-use, recycled, recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
- (f) energy is used efficiently;
- (g) the necessary measures are taken to prevent accidents and limit their consequences;
- (h) the necessary measures are taken upon definitive cessation of activities to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22.

#### Article 12

##### Applications for permits

1. Member States shall take the necessary measures to ensure that an application for a permit includes a description of the following:

- (a) the installation and its activities;
- (b) the raw and auxiliary materials, other substances and the energy used in or generated by the installation;
- (c) the sources of emissions from the installation;
- (d) the conditions of the site of the installation;
- (e) where applicable, a baseline report in accordance with Article 22(2);
- (f) the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment;
- (g) the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation;
- (h) measures for the prevention, preparation for re-use, recycling and recovery of waste generated by the installation;
- (i) further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 11;
- (j) measures planned to monitor emissions into the environment;
- (k) the main alternatives to the proposed technology, techniques and measures studied by the applicant in outline.

An application for a permit shall also include a non-technical summary of the details referred to in the first subparagraph.

2. Where information supplied in accordance with the requirements provided for in Directive 85/337/EEC or a safety report prepared in accordance with Directive 96/82/EC or other information produced in response to other legislation fulfils any of the requirements of paragraph 1, that information may be included in, or attached to, the application.

#### Article 13

##### BAT reference documents and exchange of information

1. In order to draw up, review and, where necessary, update BAT reference documents, the Commission shall organise an exchange of information between Member States, the industries concerned, non-governmental organisations promoting environmental protection and the Commission.

2. The exchange of information shall, in particular, address the following:

- (a) the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste;
- (b) the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein;
- (c) best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b).

3. The Commission shall establish and regularly convene a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

The Commission shall obtain the opinion of the forum on the practical arrangements for the exchange of information and, in particular, on the following:

- (a) the rules of procedure of the forum;
- (b) the work programme for the exchange of information;
- (c) guidance on the collection of data;
- (d) guidance on the drawing up of BAT reference documents and on their quality assurance including the suitability of their content and format.

The guidance referred to in points (c) and (d) of the second subparagraph shall take account of the opinion of the forum and shall be adopted in accordance with the regulatory procedure referred to in Article 75(2).

4. The Commission shall obtain and make publicly available the opinion of the forum on the proposed content of the BAT reference documents and shall take into account this opinion for the procedures laid down in paragraph 5.

5. Decisions on the BAT conclusions shall be adopted in accordance with the regulatory procedure referred to in Article 75(2).

6. After the adoption of a decision in accordance with paragraph 5, the Commission shall without delay make the BAT reference document publicly available and ensure that BAT conclusions are made available in all the official languages of the Union.

7. Pending the adoption of a relevant decision in accordance with paragraph 5, the conclusions on best available techniques from BAT reference documents adopted by the Commission prior to the date referred to in Article 83 shall apply as BAT conclusions for the purposes of this Chapter except for Article 15(3) and (4).

## Article 14

### Permit conditions

1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 11 and 18.

Those measures shall include at least the following:

- (a) emission limit values for polluting substances listed in Annex II, and for other polluting substances, which are likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another;
- (b) appropriate requirements ensuring protection of the soil and groundwater and measures concerning the monitoring and management of waste generated by the installation;
- (c) suitable emission monitoring requirements specifying:
  - (i) measurement methodology, frequency and evaluation procedure; and
  - (ii) where Article 15(3)(b) is applied, that results of emission monitoring are available for the same periods of time and reference conditions as for the emission levels associated with the best available techniques;
- (d) an obligation to supply the competent authority regularly, and at least annually, with:
  - (i) information on the basis of results of emission monitoring referred to in point (c) and other required data that enables the competent authority to verify compliance with the permit conditions; and
  - (ii) where Article 15(3)(b) is applied, a summary of the results of emission monitoring which allows a comparison with the emission levels associated with the best available techniques;
- (e) appropriate requirements for the regular maintenance and surveillance of measures taken to prevent emissions to soil and groundwater pursuant to point (b) and appropriate requirements concerning the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site and having regard to the possibility of soil and groundwater contamination at the site of the installation;
- (f) measures relating to conditions other than normal operating conditions such as start-up and shut-down operations, leaks, malfunctions, momentary stoppages and definitive cessation of operations;

- (g) provisions on the minimisation of long-distance or trans-boundary pollution;
- (h) conditions for assessing compliance with the emission limit values or a reference to the applicable requirements specified elsewhere.

2. For the purpose of paragraph 1(a), emission limit values may be supplemented or replaced by equivalent parameters or technical measures ensuring an equivalent level of environmental protection.

3. BAT conclusions shall be the reference for setting the permit conditions.

4. Without prejudice to Article 18, the competent authority may set stricter permit conditions than those achievable by the use of the best available techniques as described in the BAT conclusions. Member States may establish rules under which the competent authority may set such stricter conditions.

5. Where the competent authority sets permit conditions on the basis of a best available technique not described in any of the relevant BAT conclusions, it shall ensure that:

- (a) that technique is determined by giving special consideration to the criteria listed in Annex III; and
- (b) the requirements of Article 15 are complied with.

Where the BAT conclusions referred to in the first subparagraph do not contain emission levels associated with the best available techniques, the competent authority shall ensure that the technique referred to in the first subparagraph ensures a level of environmental protection equivalent to the best available techniques described in the BAT conclusions.

6. Where an activity or a type of production process carried out within an installation is not covered by any of the BAT conclusions or where those conclusions do not address all the potential environmental effects of the activity or process, the competent authority shall, after prior consultations with the operator, set the permit conditions on the basis of the best available techniques that it has determined for the activities or processes concerned, by giving special consideration to the criteria listed in Annex III.

7. For installations referred to in point 6.6 of Annex I, paragraphs 1 to 6 of this Article shall apply without prejudice to the legislation relating to animal welfare.

#### Article 15

#### **Emission limit values, equivalent parameters and technical measures**

1. The emission limit values for polluting substances shall apply at the point where the emissions leave the installation, and any dilution prior to that point shall be disregarded when determining those values.

With regard to indirect releases of polluting substances into water, the effect of a water treatment plant may be taken into account when determining the emission limit values of the installation concerned, provided that an equivalent level of protection of the environment as a whole is guaranteed and provided this does not lead to higher levels of pollution in the environment.

2. Without prejudice to Article 18, the emission limit values and the equivalent parameters and technical measures referred to in Article 14(1) and (2) shall be based on the best available techniques, without prescribing the use of any technique or specific technology.

3. The competent authority shall set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) through either of the following:

- (a) setting emission limit values that do not exceed the emission levels associated with the best available techniques. Those emission limit values shall be expressed for the same or shorter periods of time and under the same reference conditions as those emission levels associated with the best available techniques; or
- (b) setting different emission limit values than those referred to under point (a) in terms of values, periods of time and reference conditions.

Where point (b) is applied, the competent authority shall, at least annually, assess the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the best available techniques.

4. By way of derogation from paragraph 3, and without prejudice to Article 18, the competent authority may, in specific cases, set less strict emission limit values. Such a derogation may apply only where an assessment shows that the achievement of emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to:

- (a) the geographical location or the local environmental conditions of the installation concerned; or
- (b) the technical characteristics of the installation concerned.

The competent authority shall document in an annex to the permit conditions the reasons for the application of the first subparagraph including the result of the assessment and the justification for the conditions imposed.

The emission limit values set in accordance with the first subparagraph shall, however, not exceed the emission limit values set out in the Annexes to this Directive, where applicable.

The competent authority shall in any case ensure that no significant pollution is caused and that a high level of protection of the environment as a whole is achieved.

On the basis of information provided by Member States in accordance with Article 72(1), in particular concerning the application of this paragraph, the Commission may, where necessary, assess and further clarify, through guidance, the criteria to be taken into account for the application of this paragraph.

The competent authority shall re-assess the application of the first subparagraph as part of each reconsideration of the permit conditions pursuant to Article 21.

5. The competent authority may grant temporary derogations from the requirements of paragraphs 2 and 3 of this Article and from Article 11(a) and (b) for the testing and use of emerging techniques for a total period of time not exceeding 9 months, provided that after the period specified, either the technique is stopped or the activity achieves at least the emission levels associated with the best available techniques.

#### Article 16

### Monitoring requirements

1. The monitoring requirements referred to in Article 14(1)(c) shall, where applicable, be based on the conclusions on monitoring as described in the BAT conclusions.

2. The frequency of the periodic monitoring referred to in Article 14(1)(e) shall be determined by the competent authority in a permit for each individual installation or in general binding rules.

Without prejudice to the first subparagraph, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### Article 17

### General binding rules for activities listed in Annex I

1. When adopting general binding rules, Member States shall ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions.

2. General binding rules shall be based on the best available techniques, without prescribing the use of any technique or specific technology in order to ensure compliance with Articles 14 and 15.

3. Member States shall ensure that general binding rules are updated to take into account developments in best available techniques and in order to ensure compliance with Article 21.

4. General binding rules adopted in accordance with paragraphs 1 to 3 shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication.

#### Article 18

### Environmental quality standards

Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards.

#### Article 19

### Developments in best available techniques

Member States shall ensure that the competent authority follows or is informed of developments in best available techniques and of the publication of any new or updated BAT conclusions and shall make that information available to the public concerned.

#### Article 20

### Changes by operators to installations

1. Member States shall take the necessary measures to ensure that the operator informs the competent authority of any planned change in the nature or functioning, or an extension of the installation which may have consequences for the environment. Where appropriate, the competent authority shall update the permit.

2. Member States shall take the necessary measures to ensure that no substantial change planned by the operator is made without a permit granted in accordance with this Directive.

The application for a permit and the decision by the competent authority shall cover those parts of the installation and those details listed in Article 12 which may be affected by the substantial change.

3. Any change in the nature or functioning or an extension of an installation shall be deemed to be substantial if the change or extension in itself reaches the capacity thresholds set out in Annex I.

#### Article 21

### Reconsideration and updating of permit conditions by the competent authority

1. Member States shall take the necessary measures to ensure that the competent authority periodically reconsiders in accordance with paragraphs 2 to 5 all permit conditions and, where necessary to ensure compliance with this Directive, updates those conditions.

2. At the request of the competent authority, the operator shall submit all the information necessary for the purpose of reconsidering the permit conditions, including, in particular, results of emission monitoring and other data, that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques.

When reconsidering permit conditions, the competent authority shall use any information resulting from monitoring or inspections.

3. Within 4 years of publication of decisions on BAT conclusions in accordance with Article 13(5) relating to the main activity of an installation, the competent authority shall ensure that:

- (a) all the permit conditions for the installation concerned are reconsidered and, if necessary, updated to ensure compliance with this Directive, in particular, with Article 15(3) and (4), where applicable;
- (b) the installation complies with those permit conditions.

The reconsideration shall take into account all the new or updated BAT conclusions applicable to the installation and adopted in accordance with Article 13(5) since the permit was granted or last reconsidered.

4. Where an installation is not covered by any of the BAT conclusions, the permit conditions shall be reconsidered and, if necessary, updated where developments in the best available techniques allow for the significant reduction of emissions.

5. The permit conditions shall be reconsidered and, where necessary, updated at least in the following cases:

- (a) the pollution caused by the installation is of such significance that the existing emission limit values of the permit need to be revised or new such values need to be included in the permit;
- (b) the operational safety requires other techniques to be used;
- (c) where it is necessary to comply with a new or revised environmental quality standard in accordance with Article 18.

#### Article 22

##### Site closure

1. Without prejudice to Directive 2000/60/EC, Directive 2004/35/EC, Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration <sup>(1)</sup> and to relevant Union law on soil protection, the competent authority shall set permit conditions to ensure compliance with paragraphs 3 and 4 of this Article upon definitive cessation of activities.

<sup>(1)</sup> OJ L 372, 27.12.2006, p. 19.

2. Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7 January 2013.

The baseline report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for under paragraph 3.

The baseline report shall contain at least the following information:

- (a) information on the present use and, where available, on past uses of the site;
- (b) where available, existing information on soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.

Where information produced pursuant to other national or Union law fulfils the requirements of this paragraph that information may be included in, or attached to, the submitted baseline report.

The Commission shall establish guidance on the content of the baseline report.

3. Upon definitive cessation of the activities, the operator shall assess the state of soil and groundwater contamination by relevant hazardous substances used, produced or released by the installation. Where the installation has caused significant pollution of soil or groundwater by relevant hazardous substances compared to the state established in the baseline report referred to in paragraph 2, the operator shall take the necessary measures to address that pollution so as to return the site to that state. For that purpose, the technical feasibility of such measures may be taken into account.

Without prejudice to the first subparagraph, upon definitive cessation of the activities, and where the contamination of soil and groundwater at the site poses a significant risk to human health or the environment as a result of the permitted activities carried out by the operator before the permit for the installation is updated for the first time after 7 January 2013 and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d), the operator shall take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose such a risk.

4. Where the operator is not required to prepare a baseline report referred to in paragraph 2, the operator shall, upon definitive cessation of the activities, take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose any significant risk to human health or the environment due to the contamination of soil and groundwater as a result of the permitted activities and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d).

### Article 23

#### Environmental inspections

1. Member States shall set up a system of environmental inspections of installations addressing the examination of the full range of relevant environmental effects from the installations concerned.

Member States shall ensure that operators afford the competent authorities all necessary assistance to enable those authorities to carry out any site visits, to take samples and to gather any information necessary for the performance of their duties for the purposes of this Directive.

2. Member States shall ensure that all installations are covered by an environmental inspection plan at national, regional or local level and shall ensure that this plan is regularly reviewed and, where appropriate, updated.

3. Each environmental inspection plan shall include the following:

- (a) a general assessment of relevant significant environmental issues;
- (b) the geographical area covered by the inspection plan;
- (c) a register of the installations covered by the plan;
- (d) procedures for drawing up programmes for routine environmental inspections pursuant to paragraph 4;
- (e) procedures for non-routine environmental inspections pursuant to paragraph 5;
- (f) where necessary, provisions on the cooperation between different inspection authorities.

4. Based on the inspection plans, the competent authority shall regularly draw up programmes for routine environmental inspections, including the frequency of site visits for different types of installations.

The period between two site visits shall be based on a systematic appraisal of the environmental risks of the installations concerned and shall not exceed 1 year for installations posing the highest risks and 3 years for installations posing the lowest risks.

If an inspection has identified an important case of non-compliance with the permit conditions, an additional site visit shall be carried out within 6 months of that inspection.

The systematic appraisal of the environmental risks shall be based on at least the following criteria:

- (a) the potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents;
- (b) the record of compliance with permit conditions;
- (c) the participation of the operator in the Union eco-management and audit scheme (EMAS), pursuant to Regulation (EC) No 1221/2009 <sup>(1)</sup>.

The Commission may adopt guidance on the criteria for the appraisal of environmental risks.

5. Non-routine environmental inspections shall be carried out to investigate serious environmental complaints, serious environmental accidents, incidents and occurrences of non-compliance as soon as possible and, where appropriate, before the granting, reconsideration or update of a permit.

6. Following each site visit, the competent authority shall prepare a report describing the relevant findings regarding compliance of the installation with the permit conditions and conclusions on whether any further action is necessary.

The report shall be notified to the operator concerned within 2 months of the site visit taking place. The report shall be made publicly available by the competent authority in accordance with Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information <sup>(2)</sup> within 4 months of the site visit taking place.

Without prejudice to Article 8(2), the competent authority shall ensure that the operator takes all the necessary actions identified in the report within a reasonable period.

<sup>(1)</sup> Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (OJ L 342, 22.12.2009, p. 1).

<sup>(2)</sup> OJ L 41, 14.2.2003, p. 26.

*Article 24***Access to information and public participation in the permit procedure**

1. Member States shall ensure that the public concerned are given early and effective opportunities to participate in the following procedures:

- (a) the granting of a permit for new installations;
- (b) the granting of a permit for any substantial change;
- (c) the granting or updating of a permit for an installation where the application of Article 15(4) is proposed;
- (d) the updating of a permit or permit conditions for an installation in accordance with Article 21(5)(a).

The procedure set out in Annex IV shall apply to such participation.

2. When a decision on granting, reconsideration or updating of a permit has been taken, the competent authority shall make available to the public, including via the Internet in relation to points (a), (b) and (f), the following information:

- (a) the content of the decision, including a copy of the permit and any subsequent updates;
- (b) the reasons on which the decision is based;
- (c) the results of the consultations held before the decision was taken and an explanation of how they were taken into account in that decision;
- (d) the title of the BAT reference documents relevant to the installation or activity concerned;
- (e) how the permit conditions referred to in Article 14, including the emission limit values, have been determined in relation to the best available techniques and emission levels associated with the best available techniques;
- (f) where a derogation is granted in accordance with Article 15(4), the specific reasons for that derogation based on the criteria laid down in that paragraph and the conditions imposed.

3. The competent authority shall also make available to the public, including via the Internet at least in relation to point (a):

- (a) relevant information on the measures taken by the operator upon definitive cessation of activities in accordance with Article 22;

- (b) the results of emission monitoring as required under the permit conditions and held by the competent authority.

4. Paragraphs 1, 2 and 3 of this Article shall apply subject to the restrictions laid down in Article 4(1) and (2) of Directive 2003/4/EC.

*Article 25***Access to justice**

1. Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to Article 24 when one of the following conditions is met:

- (a) they have a sufficient interest;
- (b) they maintain the impairment of a right, where administrative procedural law of a Member State requires this as a precondition.

2. Member States shall determine at what stage the decisions, acts or omissions may be challenged.

3. What constitutes a sufficient interest and impairment of a right shall be determined by Member States, consistently with the objective of giving the public concerned wide access to justice.

To this end, the interest of any non-governmental organisation promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for the purpose of paragraph 1(a).

Such organisations shall also be deemed to have rights capable of being impaired for the purpose of paragraph 1(b).

4. Paragraphs 1, 2 and 3 shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

5. Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.

*Article 26***Transboundary effects**

1. Where a Member State is aware that the operation of an installation is likely to have significant negative effects on the environment of another Member State, or where a Member State which is likely to be significantly affected so requests, the Member State in whose territory the application for a permit pursuant to Article 4 or Article 20(2) was submitted shall forward to the other Member State any information required to be given or made available pursuant to Annex IV at the same time as it makes it available to the public.

Such information shall serve as a basis for any consultations necessary in the framework of the bilateral relations between the two Member States on a reciprocal and equivalent basis.

2. Within the framework of their bilateral relations, Member States shall ensure that in the cases referred to in paragraph 1, the applications are also made available for an appropriate period of time to the public of the Member State likely to be affected so that it will have the right to comment on them before the competent authority reaches its decision.

3. The results of any consultations pursuant to paragraphs 1 and 2 shall be taken into consideration when the competent authority reaches a decision on the application.

4. The competent authority shall inform any Member State which has been consulted pursuant to paragraph 1 of the decision reached on the application and shall forward to it the information referred to in Article 24(2). That Member State shall take the measures necessary to ensure that that information is made available in an appropriate manner to the public concerned in its own territory.

*Article 27***Emerging techniques**

1. Member States shall, where appropriate, encourage the development and application of emerging techniques, in particular for those emerging techniques identified in BAT reference documents.

2. The Commission shall establish guidance to assist Member States in encouraging the development and application of emerging techniques as referred to in paragraph 1.

## CHAPTER III

**SPECIAL PROVISIONS FOR COMBUSTION PLANTS***Article 28***Scope**

This Chapter shall apply to combustion plants, the total rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel used.

This Chapter shall not apply to the following combustion plants:

- (a) plants in which the products of combustion are used for the direct heating, drying, or any other treatment of objects or materials;
- (b) post-combustion plants designed to purify the waste gases by combustion which are not operated as independent combustion plants;
- (c) facilities for the regeneration of catalytic cracking catalysts;
- (d) facilities for the conversion of hydrogen sulphide into sulphur;
- (e) reactors used in the chemical industry;
- (f) coke battery furnaces;
- (g) cowpers;
- (h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;
- (i) gas turbines and gas engines used on offshore platforms;
- (j) plants which use any solid or liquid waste as a fuel other than waste referred to in point (b) of point 31 of Article 3.

*Article 29***Aggregation rules**

1. Where the waste gases of two or more separate combustion plants are discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.

2. Where two or more separate combustion plants which have been granted a permit for the first time on or after 1 July 1987, or the operators of which have submitted a complete application for a permit on or after that date, are installed in such a way that, taking technical and economic factors into account, their waste gases could in the judgement of the competent authority, be discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.

3. For the purpose of calculating the total rated thermal input of a combination of combustion plants referred to in paragraphs 1 and 2, individual combustion plants with a rated thermal input below 15 MW shall not be considered.



## Article 30

**Emission limit values**

1. Waste gases from combustion plants shall be discharged in a controlled way by means of a stack, containing one or more flues, the height of which is calculated in such a way as to safeguard human health and the environment.

2. All permits for installations containing combustion plants which have been granted a permit before 7 January 2013, or the operators of which have submitted a complete application for a permit before that date, provided that such plants are put into operation no later than 7 January 2014, shall include conditions ensuring that emissions into air from these plants do not exceed the emission limit values set out in Part 1 of Annex V.

All permits for installations containing combustion plants which had been granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC and which are in operation after 1 January 2016, shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

3. All permits for installations containing combustion plants not covered by paragraph 2 shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

4. The emission limit values set out in Parts 1 and 2 of Annex V as well as the minimum rates of desulphurisation set out in Part 5 of that Annex shall apply to the emissions of each common stack in relation to the total rated thermal input of the entire combustion plant. Where Annex V provides that emission limit values may be applied for a part of a combustion plant with a limited number of operating hours, those limit values shall apply to the emissions of that part of the plant, but shall be set in relation to the total rated thermal input of the entire combustion plant.

5. The competent authority may grant a derogation for a maximum of 6 months from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 for sulphur dioxide in respect of a combustion plant which to this end normally uses low-sulphur fuel, in cases where the operator is unable to comply with those limit values because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

Member States shall immediately inform the Commission of any derogation granted under the first subparagraph.

6. The competent authority may grant a derogation from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 in cases where a combustion plant using only gaseous fuel has to resort exceptionally to the use of other fuels because of a sudden interruption in the supply of gas and for this reason would need to be equipped with a waste gas purification facility. The period for which such a derogation is granted shall not exceed 10 days except where there is an overriding need to maintain energy supplies.

The operator shall immediately inform the competent authority of each specific case referred to in the first subparagraph.

Member States shall inform the Commission immediately of any derogation granted under the first subparagraph.

7. Where a combustion plant is extended, the emission limit values set out in Part 2 of Annex V shall apply to the extended part of the plant affected by the change and shall be set in relation to the total rated thermal input of the entire combustion plant. In the case of a change to a combustion plant, which may have consequences for the environment and which affects a part of the plant with a rated thermal input of 50 MW or more, the emission limit values as set out in Part 2 of Annex V shall apply to the part of the plant which has changed in relation to the total rated thermal input of the entire combustion plant.

8. The emission limit values set out in Parts 1 and 2 of Annex V shall not apply to the following combustion plants:

- (a) diesel engines;
- (b) recovery boilers within installations for the production of pulp.

9. For the following combustion plants, on the basis of the best available techniques, the Commission shall review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V:

- (a) the combustion plants referred to in paragraph 8;
- (b) combustion plants within refineries firing the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, taking into account the specificity of the energy systems of refineries;
- (c) combustion plants firing gases other than natural gas;
- (d) combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption.

The Commission shall, by 31 December 2013, report the results of this review to the European Parliament and to the Council accompanied, if appropriate, by a legislative proposal.

## Article 31

**Desulphurisation rate**

1. For combustion plants firing indigenous solid fuel, which cannot comply with the emission limit values for sulphur dioxide referred to in Article 30(2) and (3) due to the characteristics of this fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex and with prior validation by the competent authority of the technical report referred to in Article 72(4)(a).

2. For combustion plants firing indigenous solid fuel, which co-incinerate waste, and which cannot comply with the  $C_{\text{proc}}$  values for sulphur dioxide set out in points 3.1 or 3.2 of Part 4 of Annex VI due to the characteristics of the indigenous solid fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex. If Member States choose to apply this paragraph,  $C_{\text{waste}}$  as referred to in point 1 of Part 4 of Annex VI shall be equal to  $0 \text{ mg/Nm}^3$ .

3. The Commission shall, by 31 December 2019, review the possibility of applying minimum rates of desulphurisation set out in Part 5 of Annex V, taking into account, in particular, the best available techniques and benefits obtained from reduced sulphur dioxide emissions.

### Article 32

#### Transitional National Plan

1. During the period from 1 January 2016 to 30 June 2020, Member States may draw up and implement a transitional national plan covering combustion plants which were granted the first permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003. For each of the combustion plants covered by the plan, the plan shall cover emissions of one or more of the following pollutants: nitrogen oxides, sulphur dioxide and dust. For gas turbines, only nitrogen oxides emissions shall be covered by the plan.

The transitional national plan shall not include any of the following combustion plants:

- (a) those to which Article 33(1) applies;
- (b) those within refineries firing low calorific gases from the gasification of refinery residues or the distillation and conversion residues from the refining of crude oil for own consumption, alone or with other fuels;
- (c) those to which Article 35 applies;
- (d) those which are granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC.

2. Combustion plants covered by the plan may be exempted from compliance with the emission limit values referred to in Article 30(2) for the pollutants which are subject to the plan or, where applicable, with the rates of desulphurisation referred to in Article 31.

The emission limit values for sulphur dioxide, nitrogen oxides and dust set out in the permit for the combustion plant applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained.

Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V.

3. For each of the pollutants it covers, the transitional national plan shall set a ceiling defining the maximum total annual emissions for all of the plants covered by the plan on the basis of each plant's total rated thermal input on 31 December 2010, its actual annual operating hours and its fuel use, averaged over the last 10 years of operation up to and including 2010.

The ceiling for the year 2016 shall be calculated on the basis of the relevant emission limit values set out in Annexes III to VII to Directive 2001/80/EC or, where applicable, on the basis of the rates of desulphurisation set out in Annex III to Directive 2001/80/EC. In the case of gas turbines, the emission limit values for nitrogen oxides set out for such plants in Part B of Annex VI to Directive 2001/80/EC shall be used. The ceilings for the years 2019 and 2020 shall be calculated on the basis of the relevant emission limit values set out in Part 1 of Annex V to this Directive or, where applicable, the relevant rates of desulphurisation set out in Part 5 of Annex V to this Directive. The ceilings for the years 2017 and 2018 shall be set providing a linear decrease of the ceilings between 2016 and 2019.

Where a plant included in the transitional national plan is closed or no longer falls within the scope of Chapter III, this shall not result in an increase in total annual emissions from the remaining plants covered by the plan.

4. The transitional national plan shall also contain provisions on monitoring and reporting that comply with the implementing rules established in accordance with Article 41(b), as well as the measures foreseen for each of the plants in order to ensure timely compliance with the emission limit values that will apply from 1 July 2020.

5. Not later than 1 January 2013, Member States shall communicate their transitional national plans to the Commission.

The Commission shall evaluate the plans and, where the Commission has raised no objections within 12 months of receipt of a plan, the Member State concerned shall consider its plan to be accepted.

When the Commission considers a plan not to be in accordance with the implementing rules established in accordance with Article 41(b), it shall inform the Member State concerned that its plan cannot be accepted. In relation to the evaluation of a new version of a plan which a Member State communicates to the Commission, the time period referred to in the second subparagraph shall be 6 months.

6. Member States shall inform the Commission of any subsequent changes to the plan.

*Article 33***Limited life time derogation**

1. During the period from 1 January 2016 to 31 December 2023, combustion plants may be exempted from compliance with the emission limit values referred to in Article 30(2) and with the rates of desulphurisation referred to in Article 31, where applicable, and from their inclusion in the transitional national plan referred to in Article 32 provided that the following conditions are fulfilled:

- (a) the operator of the combustion plant undertakes, in a written declaration submitted by 1 January 2014 at the latest to the competent authority, not to operate the plant for more than 17 500 operating hours, starting from 1 January 2016 and ending no later than 31 December 2023;
- (b) the operator is required to submit each year to the competent authority a record of the number of operating hours since 1 January 2016;
- (c) the emission limit values for sulphur dioxides, nitrogen oxides and dust set out in the permit for the combustion plant applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained during the remaining operational life of the combustion plant. Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V; and
- (d) the combustion plant has not been granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC.

2. At the latest on 1 January 2016, each Member State shall communicate to the Commission a list of any combustion plants to which paragraph 1 applies, including their total rated thermal input, the fuel types used and the applicable emission limit values for sulphur dioxide, nitrogen oxides and dust. For plants subject to paragraph 1, Member States shall communicate annually to the Commission a record of the number of operating hours since 1 January 2016.

3. In case of a combustion plant being, on 6 January 2011, part of a small isolated system and accounting at that date for at least 35 % of the electricity supply within that system, which is unable, due to its technical characteristics, to comply with the emission limit values referred to in Article 30(2), the number of operating hours referred to in paragraph 1(a) of this Article shall be 18 000, starting from 1 January 2020 and ending no later than 31 December 2023, and the date referred to in paragraph 1(b) and paragraph 2 of this Article shall be 1 January 2020.

4. In case of a combustion plant with a total rated thermal input of more than 1 500 MW which started operating before 31 December 1986 and fires indigenous solid fuel with a net calorific value of less than 5 800 kJ/kg, a moisture content greater than 45 % by weight, a combined moisture and ash content

greater than 60 % by weight and a calcium oxide content in ash greater than 10 %, the number of operating hours referred to in paragraph 1(a) shall be 32 000.

*Article 34***Small isolated systems**

1. Until 31 December 2019, combustion plants being, on 6 January 2011, part of a small isolated system may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31, where applicable. Until 31 December 2019, the emission limit values set out in the permits of these combustion plants, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained.

2. Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V.

3. Where there are, on the territory of a Member State combustion plants covered by this Chapter that are part of a small isolated system, that Member State shall report to the Commission before 7 January 2013 a list of those combustion plants, the total annual energy consumption of the small isolated system and the amount of energy obtained through interconnection with other systems.

*Article 35***District heating plants**

1. Until 31 December 2022, a combustion plant may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31 provided that the following conditions are fulfilled:

- (a) the total rated thermal input of the combustion plant does not exceed 200 MW;
- (b) the plant was granted a first permit before 27 November 2002 or the operator of that plant had submitted a complete application for a permit before that date, provided that it was put into operation no later than 27 November 2003;
- (c) at least 50 % of the useful heat production of the plant, as a rolling average over a period of 5 years, is delivered in the form of steam or hot water to a public network for district heating; and
- (d) the emission limit values for sulphur dioxide, nitrogen oxides and dust set out in its permit applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, are at least maintained until 31 December 2022.

2. At the latest on 1 January 2016, each Member State shall communicate to the Commission a list of any combustion plants to which paragraph 1 applies, including their total rated thermal input, the fuel types used and the applicable emission limit values for sulphur dioxide, nitrogen oxides and dust. In addition, Member States shall, for any combustion plants to which paragraph 1 applies and during the period mentioned in that paragraph, inform the Commission annually of the proportion of useful heat production of each plant which was delivered in the form of steam or hot water to a public network for district heating, expressed as a rolling average over the preceding 5 years.

#### Article 36

### Geological storage of carbon dioxide

1. Member States shall ensure that operators of all combustion plants with a rated electrical output of 300 megawatts or more for which the original construction licence or, in the absence of such a procedure, the original operating licence is granted after the entry into force of Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide <sup>(1)</sup>, have assessed whether the following conditions are met:

- (a) suitable storage sites are available,
- (b) transport facilities are technically and economically feasible,
- (c) it is technically and economically feasible to retrofit for carbon dioxide capture.

2. If the conditions laid down in paragraph 1 are met, the competent authority shall ensure that suitable space on the installation site for the equipment necessary to capture and compress carbon dioxide is set aside. The competent authority shall determine whether the conditions are met on the basis of the assessment referred to in paragraph 1 and other available information, particularly concerning the protection of the environment and human health.

#### Article 37

### Malfunction or breakdown of the abatement equipment

1. Member States shall ensure that provision is made in the permits for procedures relating to malfunction or breakdown of the abatement equipment.

2. In the case of a breakdown, the competent authority shall require the operator to reduce or close down operations if a return to normal operation is not achieved within 24 hours, or to operate the plant using low polluting fuels.

The operator shall notify the competent authority within 48 hours after the malfunction or breakdown of the abatement equipment.

<sup>(1)</sup> OJ L 140, 5.6.2009, p. 114.

The cumulative duration of unabated operation shall not exceed 120 hours in any 12-month period.

The competent authority may grant a derogation from the time limits set out in the first and third subparagraphs in one of the following cases:

- (a) there is an overriding need to maintain energy supplies;
- (b) the combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.

#### Article 38

### Monitoring of emissions into air

1. Member States shall ensure that the monitoring of air polluting substances is carried out in accordance with Part 3 of Annex V.

2. The installation and functioning of the automated monitoring equipment shall be subject to control and to annual surveillance tests as set out in Part 3 of Annex V.

3. The competent authority shall determine the location of the sampling or measurement points to be used for the monitoring of emissions.

4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

#### Article 39

### Compliance with emission limit values

The emission limit values for air shall be regarded as being complied with if the conditions set out in Part 4 of Annex V are fulfilled.

#### Article 40

### Multi-fuel firing combustion plants

1. In the case of a multi-fuel firing combustion plant involving the simultaneous use of two or more fuels, the competent authority shall set the emission limit values in accordance with the following steps:

- (a) taking the emission limit value relevant for each individual fuel and pollutant corresponding to the total rated thermal input of the entire combustion plant as set out in Parts 1 and 2 of Annex V;
- (b) determining fuel-weighted emission limit values, which are obtained by multiplying the individual emission limit value referred to in point (a) by the thermal input delivered by each fuel, and dividing the product of multiplication by the sum of the thermal inputs delivered by all fuels,
- (c) aggregating the fuel-weighted emission limit values.

2. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the following emission limit values may be applied instead of the emission limit values set according to paragraph 1:

- (a) where, during the operation of the combustion plant, the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is 50 % or more, the emission limit value set in Part 1 of Annex V for the determinative fuel;
- (b) where the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is less than 50 %, the emission limit value determined in accordance with the following steps:
  - (i) taking the emission limit values set out in Part 1 of Annex V for each of the fuels used, corresponding to the total rated thermal input of the combustion plant;
  - (ii) calculating the emission limit value of the determinative fuel by multiplying the emission limit value, determined for that fuel according to point (i), by a factor of two, and subtracting from this product the emission limit value of the fuel used with the lowest emission limit value as set out in Part 1 of Annex V, corresponding to the total rated thermal input of the combustion plant;
  - (iii) determining the fuel-weighted emission limit value for each fuel used by multiplying the emission limit value determined under points (i) and (ii) by the thermal input of the fuel concerned and by dividing the product of this multiplication by the sum of the thermal inputs delivered by all fuels;
  - (iv) aggregating the fuel-weighted emission limit values determined under point (iii).

3. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the average emission limit values for sulphur dioxide set out in Part 7 of Annex V may be applied instead of the emission limit values set according to paragraphs 1 or 2 of this Article.

#### Article 41

#### Implementing rules

Implementing rules shall be established concerning:

- (a) the determination of the start-up and shut-down periods referred to in point 27 of Article 3 and in point 1 of Part 4 of Annex V; and
- (b) the transitional national plans referred to in Article 32 and, in particular, the setting of emission ceilings and related monitoring and reporting.

Those implementing rules shall be adopted in accordance with the regulatory procedure referred to in Article 75(2). The Commission shall make appropriate proposals not later than 7 July 2011.

#### CHAPTER IV

#### SPECIAL PROVISIONS FOR WASTE INCINERATION PLANTS AND WASTE CO-INCINERATION PLANTS

#### Article 42

#### Scope

1. This Chapter shall apply to waste incineration plants and waste co-incineration plants which incinerate or co-incinerate solid or liquid waste.

This Chapter shall not apply to gasification or pyrolysis plants, if the gases resulting from this thermal treatment of waste are purified to such an extent that they are no longer a waste prior to their incineration and they can cause emissions no higher than those resulting from the burning of natural gas.

For the purposes of this Chapter, waste incineration plants and waste co-incineration plants shall include all incineration lines or co-incineration lines, waste reception, storage, on site pretreatment facilities, waste-, fuel- and air-supply systems, boilers, facilities for the treatment of waste gases, on-site facilities for treatment or storage of residues and waste water, stacks, devices and systems for controlling incineration or co-incineration operations, recording and monitoring incineration or co-incineration conditions.

If processes other than oxidation, such as pyrolysis, gasification or plasma process, are applied for the thermal treatment of waste, the waste incineration plant or waste co-incineration plant shall include both the thermal treatment process and the subsequent incineration process.

If waste co-incineration takes place in such a way that the main purpose of the plant is not the generation of energy or production of material products but rather the thermal treatment of waste, the plant shall be regarded as a waste incineration plant.

2. This Chapter shall not apply to the following plants:

- (a) plants treating only the following wastes:
  - (i) waste listed in point (b) of point 31 of Article 3;
  - (ii) radioactive waste;
  - (iii) animal carcasses as regulated by Regulation (EC) No 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption <sup>(1)</sup>;

<sup>(1)</sup> OJ L 273, 10.10.2002, p. 1.

- (iv) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installations;
- (b) experimental plants used for research, development and testing in order to improve the incineration process and which treat less than 50 tonnes of waste per year.

#### Article 43

##### Definition of residue

For the purposes of this Chapter, 'residue' shall mean any liquid or solid waste which is generated by a waste incineration plant or waste co-incineration plant.

#### Article 44

##### Applications for permits

An application for a permit for a waste incineration plant or waste co-incineration plant shall include a description of the measures which are envisaged to guarantee that the following requirements are met:

- (a) the plant is designed, equipped and will be maintained and operated in such a manner that the requirements of this Chapter are met taking into account the categories of waste to be incinerated or co-incinerated;
- (b) the heat generated during the incineration and co-incineration process is recovered as far as practicable through the generation of heat, steam or power;
- (c) the residues will be minimised in their amount and harmfulness and recycled where appropriate;
- (d) the disposal of the residues which cannot be prevented, reduced or recycled will be carried out in conformity with national and Union law.

#### Article 45

##### Permit conditions

1. The permit shall include the following:
  - (a) a list of all types of waste which may be treated using at least the types of waste set out in the European Waste List established by Decision 2000/532/EC, if possible, and containing information on the quantity of each type of waste, where appropriate;
  - (b) the total waste incinerating or co-incinerating capacity of the plant;
  - (c) the limit values for emissions into air and water;
  - (d) the requirements for the pH, temperature and flow of waste water discharges;

- (e) the sampling and measurement procedures and frequencies to be used to comply with the conditions set for emission monitoring;
- (f) the maximum permissible period of any technically unavoidable stoppages, disturbances, or failures of the purification devices or the measurement devices, during which the emissions into the air and the discharges of waste water may exceed the prescribed emission limit values.

2. In addition to the requirements set out in paragraph 1, the permit granted to a waste incineration plant or waste co-incineration plant using hazardous waste shall include the following:

- (a) a list of the quantities of the different categories of hazardous waste which may be treated;
  - (b) the minimum and maximum mass flows of those hazardous wastes, their lowest and maximum calorific values and their maximum contents of polychlorinated biphenyls, pentachlorophenol, chlorine, fluorine, sulphur, heavy metals and other polluting substances.
3. Member States may list the categories of waste to be included in the permit which can be co-incinerated in certain categories of waste co-incineration plants.
4. The competent authority shall periodically reconsider and, where necessary, update permit conditions.

#### Article 46

##### Control of emissions

1. Waste gases from waste incineration plants and waste co-incineration plants shall be discharged in a controlled way by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

2. Emissions into air from waste incineration plants and waste co-incineration plants shall not exceed the emission limit values set out in parts 3 and 4 of Annex VI or determined in accordance with Part 4 of that Annex.

If in a waste co-incineration plant more than 40 % of the resulting heat release comes from hazardous waste, or the plant co-incinerates untreated mixed municipal waste, the emission limit values set out in Part 3 of Annex VI shall apply.

3. Discharges to the aquatic environment of waste water resulting from the cleaning of waste gases shall be limited as far as practicable and the concentrations of polluting substances shall not exceed the emission limit values set out in Part 5 of Annex VI.

4. The emission limit values shall apply at the point where waste waters from the cleaning of waste gases are discharged from the waste incineration plant or waste co-incineration plant.

When waste waters from the cleaning of waste gases are treated outside the waste incineration plant or waste co-incineration plant at a treatment plant intended only for the treatment of this sort of waste water, the emission limit values set out in Part 5 of Annex VI shall be applied at the point where the waste waters leave the treatment plant. Where the waste water from the cleaning of waste gases is treated collectively with other sources of waste water, either on site or off site, the operator shall make the appropriate mass balance calculations, using the results of the measurements set out in point 2 of Part 6 of Annex VI in order to determine the emission levels in the final waste water discharge that can be attributed to the waste water arising from the cleaning of waste gases.

Under no circumstances shall dilution of waste water take place for the purpose of complying with the emission limit values set out in Part 5 of Annex VI.

5. Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and operated in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater.

Storage capacity shall be provided for contaminated rainwater run-off from the waste incineration plant site or waste co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations. The storage capacity shall be adequate to ensure that such waters can be tested and treated before discharge where necessary.

6. Without prejudice to Article 50(4)(c), the waste incineration plant or waste co-incineration plant or individual furnaces being part of a waste incineration plant or waste co-incineration plant shall under no circumstances continue to incinerate waste for a period of more than 4 hours uninterrupted where emission limit values are exceeded.

The cumulative duration of operation in such conditions over 1 year shall not exceed 60 hours.

The time limit set out in the second subparagraph shall apply to those furnaces which are linked to one single waste gas cleaning device.

#### Article 47

#### Breakdown

In the case of a breakdown, the operator shall reduce or close down operations as soon as practicable until normal operations can be restored.

#### Article 48

#### Monitoring of emissions

1. Member States shall ensure that the monitoring of emissions is carried out in accordance with Parts 6 and 7 of Annex VI.
2. The installation and functioning of the automated measuring systems shall be subject to control and to annual surveillance tests as set out in point 1 of Part 6 of Annex VI.
3. The competent authority shall determine the location of the sampling or measurement points to be used for monitoring of emissions.
4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.
5. As soon as appropriate measurement techniques are available within the Union, the Commission shall, by means of delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78, set the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out.

#### Article 49

#### Compliance with emission limit values

The emission limit values for air and water shall be regarded as being complied with if the conditions described in Part 8 of Annex VI are fulfilled.

#### Article 50

#### Operating conditions

1. Waste incineration plants shall be operated in such a way as to achieve a level of incineration such that the total organic carbon content of slag and bottom ashes is less than 3 % or their loss on ignition is less than 5 % of the dry weight of the material. If necessary, waste pre-treatment techniques shall be used.
2. Waste incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the incineration of waste is raised, after the last injection of combustion air, in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 850 °C for at least two seconds.

Waste co-incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 850 °C for at least two seconds.

If hazardous waste with a content of more than 1 % of halogenated organic substances, expressed as chlorine, is incinerated or co-incinerated, the temperature required to comply with the first and second subparagraphs shall be at least 1 100 °C.

In waste incineration plants, the temperatures set out in the first and third subparagraphs shall be measured near the inner wall of the combustion chamber. The competent authority may authorise the measurements at another representative point of the combustion chamber.

3. Each combustion chamber of a waste incineration plant shall be equipped with at least one auxiliary burner. This burner shall be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below the temperatures set out in paragraph 2. It shall also be used during plant start-up and shut-down operations in order to ensure that those temperatures are maintained at all times during these operations and as long as unburned waste is in the combustion chamber.

The auxiliary burner shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gas oil as defined in Article 2(2) of Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels <sup>(1)</sup>, liquefied gas or natural gas.

4. Waste incineration plants and waste co-incineration plants shall operate an automatic system to prevent waste feed in the following situations:

- (a) at start-up, until the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) has been reached;
- (b) whenever the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) is not maintained;
- (c) whenever the continuous measurements show that any emission limit value is exceeded due to disturbances or failures of the waste gas cleaning devices.

5. Any heat generated by waste incineration plants or waste co-incineration plants shall be recovered as far as practicable.

6. Infectious clinical waste shall be placed straight in the furnace, without first being mixed with other categories of waste and without direct handling.

7. Member States shall ensure that the waste incineration plant or waste co-incineration plant is operated and controlled by a natural person who is competent to manage the plant.

<sup>(1)</sup> OJ L 121, 11.5.1999, p. 13.

## Article 51

### Authorisation to change operating conditions

1. Conditions different from those laid down in Article 50(1), (2) and (3) and, as regards the temperature, paragraph 4 of that Article and specified in the permit for certain categories of waste or for certain thermal processes, may be authorised by the competent authority provided the other requirements of this Chapter are met. Member States may lay down rules governing these authorisations.

2. For waste incineration plants, the change of the operating conditions shall not cause more residues or residues with a higher content of organic polluting substances compared to those residues which could be expected under the conditions laid down in Article 50(1), (2) and (3).

3. Emissions of total organic carbon and carbon monoxide from waste co-incineration plants, authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

Emissions of total organic carbon from bark boilers within the pulp and paper industry co-incinerating waste at the place of its production which were in operation and had a permit before 28 December 2002 and which are authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

4. Member States shall communicate to the Commission all operating conditions authorised under paragraphs 1, 2 and 3 and the results of verifications made as part of the information provided in accordance with the reporting requirements under Article 72.

## Article 52

### Delivery and reception of waste

1. The operator of the waste incineration plant or waste co-incineration plant shall take all necessary precautions concerning the delivery and reception of waste in order to prevent or to limit as far as practicable the pollution of air, soil, surface water and groundwater as well as other negative effects on the environment, odours and noise, and direct risks to human health.

2. The operator shall determine the mass of each type of waste, if possible according to the European Waste List established by Decision 2000/532/EC, prior to accepting the waste at the waste incineration plant or waste co-incineration plant.

3. Prior to accepting hazardous waste at the waste incineration plant or waste co-incineration plant, the operator shall collect available information about the waste for the purpose of verifying compliance with the permit requirements specified in Article 45(2).



That information shall cover the following:

- (a) all the administrative information on the generating process contained in the documents mentioned in paragraph 4(a);
- (b) the physical, and as far as practicable, chemical composition of the waste and all other information necessary to evaluate its suitability for the intended incineration process;
- (c) the hazardous characteristics of the waste, the substances with which it cannot be mixed, and the precautions to be taken in handling the waste.

4. Prior to accepting hazardous waste at the waste incineration plant or waste co-incineration plant, at least the following procedures shall be carried out by the operator:

- (a) the checking of the documents required by Directive 2008/98/EC and, where applicable, those required by Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste <sup>(1)</sup> and by legislation on transport of dangerous goods;
- (b) the taking of representative samples, unless inappropriate as far as possible before unloading, to verify conformity with the information provided for in paragraph 3 by carrying out controls and to enable the competent authorities to identify the nature of the wastes treated.

The samples referred to in point (b) shall be kept for at least 1 month after the incineration or co-incineration of the waste concerned.

5. The competent authority may grant exemptions from paragraphs 2, 3 and 4 to waste incineration plants or waste co-incineration plants which are a part of an installation covered by Chapter II and only incinerate or co-incinerate waste generated within that installation.

#### Article 53

#### Residues

1. Residues shall be minimised in their amount and harmfulness. Residues shall be recycled, where appropriate, directly in the plant or outside.
2. Transport and intermediate storage of dry residues in the form of dust shall take place in such a way as to prevent dispersal of those residues in the environment.
3. Prior to determining the routes for the disposal or recycling of the residues, appropriate tests shall be carried out to establish

<sup>(1)</sup> OJ L 190, 12.7.2006, p. 1.

the physical and chemical characteristics and the polluting potential of the residues. Those tests shall concern the total soluble fraction and heavy metals soluble fraction.

#### Article 54

#### Substantial change

A change of operation of a waste incineration plant or a waste co-incineration plant treating only non-hazardous waste in an installation covered by Chapter II which involves the incineration or co-incineration of hazardous waste shall be regarded as a substantial change.

#### Article 55

#### Reporting and public information on waste incineration plants and waste co-incineration plants

1. Applications for new permits for waste incineration plants and waste co-incineration plants shall be made available to the public at one or more locations for an appropriate period to enable the public to comment on the applications before the competent authority reaches a decision. That decision, including at least a copy of the permit, and any subsequent updates, shall also be made available to the public.
2. For waste incineration plants or waste co-incineration plants with a nominal capacity of 2 tonnes or more per hour, the report referred to in Article 72 shall include information on the functioning and monitoring of the plant and give account of the running of the incineration or co-incineration process and the level of emissions into air and water in comparison with the emission limit values. That information shall be made available to the public.
3. A list of waste incineration plants or waste co-incineration plants with a nominal capacity of less than 2 tonnes per hour shall be drawn up by the competent authority and shall be made available to the public.

#### CHAPTER V

#### SPECIAL PROVISIONS FOR INSTALLATIONS AND ACTIVITIES USING ORGANIC SOLVENTS

#### Article 56

#### Scope

This chapter shall apply to activities listed in Part 1 of Annex VII and, where applicable, reaching the consumption thresholds set out in Part 2 of that Annex.

*Article 57***Definitions**

For the purposes of this Chapter, the following definitions shall apply:

- (1) 'existing installation' means an installation in operation on 29 March 1999 or which was granted a permit or registered before 1 April 2001 or the operator of which submitted a complete application for a permit before 1 April 2001, provided that that installation was put in operation no later than 1 April 2002;
- (2) 'waste gases' means the final gaseous discharge containing volatile organic compounds or other pollutants from a stack or abatement equipment into air;
- (3) 'fugitive emissions' means any emissions not in waste gases of volatile organic compounds into air, soil and water as well as solvents contained in any products, unless otherwise stated in Part 2 of Annex VII;
- (4) 'total emissions' means the sum of fugitive emissions and emissions in waste gases;
- (5) 'mixture' means mixture as defined in Article 3(2) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency <sup>(1)</sup>,
- (6) 'adhesive' means any mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used to adhere separate parts of a product;
- (7) 'ink' means a mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used in a printing activity to impress text or images on to a surface;
- (8) 'varnish' means a transparent coating;
- (9) 'consumption' means the total input of organic solvents into an installation per calendar year, or any other 12-month period, less any volatile organic compounds that are recovered for re-use;
- (10) 'input' means the quantity of organic solvents and their quantity in mixtures used when carrying out an activity, including the solvents recycled inside and outside the installation, and which are counted every time they are used to carry out the activity;

- (11) 're-use' means the use of organic solvents recovered from an installation for any technical or commercial purpose and including use as a fuel but excluding the final disposal of such recovered organic solvent as waste;
- (12) 'contained conditions' means conditions under which an installation is operated so that the volatile organic compounds released from the activity are collected and discharged in a controlled way either via a stack or abatement equipment and are, therefore, not entirely fugitive;
- (13) 'start-up and shut-down operations' means operations excluding regularly oscillating activity phases whilst bringing an activity, an equipment item or a tank into or out of service or into or out of an idling state.

*Article 58***Substitution of hazardous substances**

Substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No 1272/2008, are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F, shall be replaced, as far as possible by less harmful substances or mixtures within the shortest possible time.

*Article 59***Control of emissions**

1. Member States shall take the necessary measures to ensure that each installation complies with either of the following:
  - (a) the emission of volatile organic compounds from installations shall not exceed the emission limit values in waste gases and the fugitive emission limit values, or the total emission limit values, and other requirements laid down in Parts 2 and 3 of Annex VII are complied with;
  - (b) the requirements of the reduction scheme set out in Part 5 of Annex VII provided that an equivalent emission reduction is achieved compared to that achieved through the application of the emission limit values referred to in point (a).

Member States shall report to the Commission in accordance with Article 72(1) on the progress in achieving the equivalent emission reduction referred to in point (b).

2. By way of derogation from paragraph 1(a), where the operator demonstrates to the competent authority that for an individual installation the emission limit value for fugitive emissions is not technically and economically feasible, the competent authority may allow emissions to exceed that emission limit value provided that significant risks to human health or the environment are not to be expected and that the operator demonstrates to the competent authority that the best available techniques are being used.

<sup>(1)</sup> OJ L 396, 30.12.2006, p. 1.

3. By way of derogation from paragraph 1, for coating activities covered by item 8 of the table in Part 2 of Annex VII which cannot be carried out under contained conditions, the competent authority may allow the emissions of the installation not to comply with the requirements set out in that paragraph if the operator demonstrates to the competent authority that such compliance is not technically and economically feasible and that the best available techniques are being used.

4. Member States shall report to the Commission on the derogations referred to in paragraphs 2 and 3 of this Article in accordance with Article 72(2).

5. The emissions of either volatile organic compounds which are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351, shall be controlled under contained conditions as far as technically and economically feasible to safeguard public health and the environment and shall not exceed the relevant emission limit values set out in Part 4 of Annex VII.

6. Installations where two or more activities are carried out, each of which exceeds the thresholds in Part 2 of Annex VII shall:

- (a) as regards the substances specified in paragraph 5, meet the requirements of that paragraph for each activity individually;
- (b) as regards all other substances, either:
  - (i) meet the requirements of paragraph 1 for each activity individually; or
  - (ii) have total emissions of volatile organic compounds not exceeding those which would have resulted had point (i) been applied.

7. All appropriate precautions shall be taken to minimise emissions of volatile organic compounds during start-up and shut-down operations.

#### Article 60

### Monitoring of emissions

Member States shall, either by specification in the permit conditions or by general binding rules, ensure that measurements of emissions are carried out in accordance with Part 6 of Annex VII.

#### Article 61

### Compliance with emission limit values

The emission limit values in waste gases shall be regarded as being complied with if the conditions set out in Part 8 of Annex VII are fulfilled.

#### Article 62

### Reporting on compliance

The operator shall supply the competent authority, on request, with data enabling the competent authority to verify compliance with either of the following:

- (a) emission limit values in waste gases, fugitive emission limit values and total emission limit values;
- (b) the requirements of the reduction scheme under Part 5 of Annex VII;
- (c) the derogations granted in accordance with Article 59(2) and (3).

This may include a solvent management plan prepared in accordance with Part 7 of Annex VII.

#### Article 63

### Substantial change to existing installations

1. A change of the maximum mass input of organic solvents by an existing installation averaged over 1 day, where the installation is operated at its design output under conditions other than start-up and shut-down operations and maintenance of equipment, shall be considered as substantial if it leads to an increase of emissions of volatile organic compounds of more than:

- (a) 25 % for an installation carrying out either activities which fall within the lower threshold band of items 1, 3, 4, 5, 8, 10, 13, 16 or 17 of the table in Part 2 of Annex VII or, activities which fall under one of the other items of Part 2 of Annex VII, and with a solvent consumption of less than 10 tonnes per year;
- (b) 10 % for all other installations.

2. Where an existing installation undergoes a substantial change, or falls within the scope of this Directive for the first time following a substantial change, that part of the installation which undergoes the substantial change shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.

3. In case of a substantial change, the competent authority shall check compliance of the installation with the requirements of this Directive.

#### Article 64

### Exchange of information on substitution of organic solvents

The Commission shall organise an exchange of information with the Member States, the industry concerned and non-governmental organisations promoting environmental protection on the use of organic solvents and their potential substitutes and techniques which have the least potential effects on air, water, soil, ecosystems and human health.

The exchange of information shall be organised on all of the following:

- (a) fitness for use;
- (b) potential effects on human health and occupational exposure in particular;
- (c) potential effects on the environment;
- (d) the economic consequences, in particular the costs and benefits of the options available.

#### Article 65

##### Access to information

1. The decision of the competent authority, including at least a copy of the permit, and any subsequent updates, shall be made available to the public.

The general binding rules applicable for installations and the list of installations subject to permitting and registration shall be made available to the public.

2. The results of the monitoring of emissions as required under Article 60 and held by the competent authority shall be made available to the public.

3. Paragraphs 1 and 2 of this Article shall apply, subject to the restrictions laid down in Article 4(1) and (2) of Directive 2003/4/EC.

#### CHAPTER VI

##### SPECIAL PROVISIONS FOR INSTALLATIONS PRODUCING TITANIUM DIOXIDE

#### Article 66

##### Scope

This Chapter shall apply to installations producing titanium dioxide.

#### Article 67

##### Prohibition of the disposal of waste

Member States shall prohibit the disposal of the following waste into any water body, sea or ocean:

- (a) solid waste;
- (b) the mother liquors arising from the filtration phase following hydrolysis of the titanyl sulphate solution from installations applying the sulphate process; including the acid waste associated with such liquors, containing overall more than 0,5 % free sulphuric acid and various heavy metals and including such mother liquors which have been diluted until they contain 0,5 % or less free sulphuric acid;

(c) waste from installations applying the chloride process containing more than 0,5 % free hydrochloric acid and various heavy metals, including such waste which has been diluted until it contains 0,5 % or less free hydrochloric acid;

(d) filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralisation) of the waste mentioned under points (b) and (c) and containing various heavy metals, but not including neutralised and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value above 5,5.

#### Article 68

##### Control of emissions into water

Emissions from installations into water shall not exceed the emission limit values set out in Part 1 of Annex VIII.

#### Article 69

##### Prevention and control of emissions into air

1. The emission of acid droplets from installations shall be prevented.

2. Emissions into air from installations shall not exceed the emission limit values set out in Part 2 of Annex VIII.

#### Article 70

##### Monitoring of emissions

1. Member States shall ensure the monitoring of emissions into water in order to enable the competent authority to verify compliance with the permit conditions and Article 68.

2. Member States shall ensure the monitoring of emissions into air in order to enable the competent authority to verify compliance with the permit conditions and Article 69. Such monitoring shall include at least monitoring of emissions as set out in Part 3 of Annex VIII.

3. Monitoring shall be carried out in accordance with CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality.

## CHAPTER VII

## COMMITTEE, TRANSITIONAL AND FINAL PROVISIONS

## Article 71

**Competent authorities**

Member States shall designate the competent authorities responsible for carrying out the obligations arising from this Directive.

## Article 72

**Reporting by Member States**

1. Member States shall ensure that information is made available to the Commission on the implementation of this Directive, on representative data on emissions and other forms of pollution, on emission limit values, on the application of best available techniques in accordance with Articles 14 and 15, in particular on the granting of exemptions in accordance with Article 15(4), and on progress made concerning the development and application of emerging techniques in accordance with Article 27. Member States shall make the information available in an electronic format.

2. The type, format and frequency of information to be made available pursuant to paragraph 1 shall be established in accordance with the regulatory procedure referred to in Article 75(2). This shall include the determination of the specific activities and pollutants for which data referred to in paragraph 1 shall be made available.

3. For all combustion plants covered by Chapter III of this Directive, Member States shall, from 1 January 2016, establish an annual inventory of the sulphur dioxide, nitrogen oxides and dust emissions and energy input.

Taking into account the aggregation rules set out in Article 29, the competent authority shall obtain the following data for each combustion plant:

- (a) the total rated thermal input (MW) of the combustion plant;
- (b) the type of combustion plant: boiler, gas turbine, gas engine, diesel engine, other (specifying the type);
- (c) the date of the start of operation of the combustion plant;
- (d) the total annual emissions (tonnes per year) of sulphur dioxide, nitrogen oxides and dust (as total suspended particles);
- (e) the number of operating hours of the combustion plant;
- (f) the total annual amount of energy input, related to the net calorific value (TJ per year), broken down in terms of the following categories of fuel: coal, lignite, biomass, peat, other solid fuels (specifying the type), liquid fuels, natural gas, other gases (specifying the type).

The annual plant-by-plant data contained in these inventories shall be made available to the Commission upon request.

A summary of the inventories shall be made available to the Commission every 3 years within 12 months from the end of the three-year period considered. This summary shall show separately the data for combustion plants within refineries.

The Commission shall make available to the Member States and to the public a summary of the comparison and evaluation of those inventories in accordance with Directive 2003/4/EC within 24 months from the end of the three-year period considered.

4. Member States shall, from 1 January 2016, report the following data annually to the Commission:

- (a) for combustion plants to which Article 31 applies, the sulphur content of the indigenous solid fuel used and the rate of desulphurisation achieved, averaged over each month. For the first year where Article 31 is applied, the technical justification of the non-feasibility of complying with the emission limit values referred to in Article 30(2) and (3) shall also be reported; and
- (b) for combustion plants which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the number of operating hours per year.

## Article 73

**Review**

1. By 7 January 2016, and every 3 years thereafter, the Commission shall submit to the European Parliament and to the Council a report reviewing the implementation of this Directive on the basis of the information referred to in Article 72.

That report shall include an assessment of the need for Union action through the establishment or updating of Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance for activities within the scope of the BAT conclusions adopted during the previous three-year period, on the basis of the following criteria:

- (a) the impact of the activities concerned on the environment as a whole; and
- (b) the state of implementation of best available techniques for the activities concerned.

That assessment shall consider the opinion of the forum referred to in Article 13(4).

Chapter III and Annex V of this Directive shall be considered to represent the Union-wide minimum requirements in the case of large combustion plants.

The report shall be accompanied by a legislative proposal where appropriate. Where the assessment referred to in the second subparagraph identifies such a need, the legislative proposal shall include provisions establishing or updating Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance assessment for the activities concerned.

2. The Commission shall, by 31 December 2012, review the need to control emissions from:

- (a) the combustion of fuels in installations with a total rated thermal input below 50 MW;
- (b) the intensive rearing of cattle; and
- (c) the spreading of manure.

The Commission shall report the results of that review to the European Parliament and to the Council accompanied by a legislative proposal where appropriate.

3. The Commission shall report to the European Parliament and the Council, by 31 December 2011, on the establishment in Annex I of:

- (a) differentiated capacity thresholds for the rearing of different poultry species, including the specific case of quail;
- (b) capacity thresholds for the simultaneous rearing of different types of animals within the same installation.

The Commission shall report the results of that review to the European Parliament and to the Council accompanied by a legislative proposal where appropriate.

#### Article 74

##### Amendments of Annexes

In order to allow the provisions of this Directive to be adapted to scientific and technical progress on the basis of best available techniques, the Commission shall adopt delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78 as regards the adaptation of Parts 3 and 4 of Annex V, Parts 2, 6, 7 and 8 of Annex VI and Parts 5, 6, 7 and 8 of Annex VII to such scientific and technical progress.

#### Article 75

##### Committee procedure

1. The Commission shall be assisted by a committee.
2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at 3 months.

#### Article 76

##### Exercise of the delegation

1. The power to adopt the delegated acts referred to in Article 48(5) and Article 74 shall be conferred on the Commission for a period of 5 years from 6 January 2011. The Commission shall draw up a report in respect of the delegated power at the latest 6 months before the end of the five-year period. The delegation of power shall be automatically extended for periods of an identical duration, unless the European Parliament or the Council revokes it in accordance with Article 77.

2. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

3. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in Articles 77 and 78.

#### Article 77

##### Revocation of the delegation

1. The delegation of power referred to in Article 48(5) and Article 74 may be revoked at any time by the European Parliament or by the Council.

2. The institution which has commenced an internal procedure for deciding whether to revoke a delegation of power shall endeavour to inform the other institution and the Commission within a reasonable time before the final decision is taken, indicating the delegated power which could be subject to revocation and possible reasons for a revocation.

3. The decision of revocation shall put an end to the delegation of the power specified in that decision. It shall take effect immediately or on a later date specified therein. It shall not affect the validity of the delegated acts already in force. It shall be published in the *Official Journal of the European Union*.

#### Article 78

##### Objections to delegated acts

1. The European Parliament or the Council may object to a delegated act within a period of 2 months from the date of notification.

At the initiative of the European Parliament or the Council that period shall be extended by 2 months.

2. If, on expiry of the period referred to in paragraph 1, neither the European Parliament nor the Council has objected to the delegated act, it shall be published in the *Official Journal of the European Union* and shall enter into force on the date stated therein.

The delegated act may be published in the *Official Journal of the European Union* and enter into force before the expiry of that period if the European Parliament and the Council have both informed the Commission of their intention not to raise objections.

3. If either the European Parliament or the Council objects to the delegated act within the period referred to in paragraph 1, it shall not enter into force. The institution which objects shall state the reasons for objecting to the delegated act.

#### Article 79

##### Penalties

Member States shall determine penalties applicable to infringements of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 7 January 2013 and shall notify it without delay of any subsequent amendment affecting them.

#### Article 80

##### Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 2, points (8), (11) to (15), (18) to (23), (26) to (30), (34) to (38) and (41) of Article 3, Article 4(2) and (3), Article 7, Articles 8 and 10, Article 11(e) and (h), Article 12(1)(e) and (h), Article 13(7), point (ii) of Article 14(1)(c), points (d), (e), (f) and (h) of Article 14(1), Article 14(2) to (7), Article 15(2) to (5), Articles 16, 17 and 19, Article 21(2) to (5), Articles 22, 23, 24, 27, 28 and 29, Article 30(1), (2), (3), (4), (7) and (8), Articles 31, 32, 33, 34, 35, 36, 38 and 39, Article 40(2) and (3), Articles 42 and 43, Article 45(1), Article 58, Article 59(5), Article 63, Article 65(3), Articles 69, 70, 71, 72 and 79, and with the first subparagraph and points 1.1, 1.4, 2.5(b), 3.1, 4, 5, 6.1(c), 6.4(b), 6.10 and 6.11 of Annex I, Annex II, point 12 of Annex III, Annex V, point (b) of Part 1, points 2.2, 2.4, 3.1 and 3.2 of Part 4, points 2.5 and 2.6 of Part 6 and point 1.1(d) of Part 8 of Annex VI, point 2 of Part 4, point 1 of Part 5, point 3 of Part 7 of Annex VII, points 1 and 2(c) of Part 1, points 2 and 3 of Part 2 and Part 3 of Annex VIII by 7 January 2013.

They shall apply those measures from that same date.

When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

#### Article 81

##### Repeal

1. Directives 78/176/EEC, 82/883/EEC, 92/112/EEC, 1999/13/EC, 2000/76/EC and 2008/1/EC, as amended by the acts listed in Annex IX, Part A are repealed with effect from 7 January 2014, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex IX, Part B.

2. Directive 2001/80/EC as amended by the acts listed in Annex IX, Part A is repealed with effect from 1 January 2016, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex IX, Part B.

3. References to the repealed Directives shall be construed as references to this Directive and shall be read in accordance with the correlation table set out in Annex X.

#### Article 82

##### Transitional provisions

1. In relation to installations carrying out activities referred to in Annex I, point 1.1 for activities with a total rated thermal input exceeding 50 MW, points 1.2 and 1.3, point 1.4(a), points 2.1 to 2.6, points 3.1 to 3.5, points 4.1 to 4.6 for activities concerning production by chemical processing, points 5.1 and 5.2 for activities covered by Directive 2008/1/EC, point 5.3 (a)(i) and (ii), point 5.4, point 6.1(a) and (b), points 6.2 and 6.3, point 6.4(a), point 6.4(b) for activities covered by Directive 2008/1/EC, point 6.4(c) and points 6.5 to 6.9 which are in operation and hold a permit before 7 January 2013 or the operators of which have submitted a complete application for a permit before that date, provided that those installations are put into operation no later than 7 January 2014, Member States shall apply the laws, regulations and administrative provisions adopted in accordance with Article 80(1) from 7 January 2014 with the exception of Chapter III and Annex V.

2. In relation to installations carrying out activities referred to in Annex I, point 1.1 for activities with a total rated thermal input of 50 MW, point 1.4(b), points 4.1 to 4.6 for activities concerning production by biological processing, points 5.1 and 5.2 for activities not covered by Directive 2008/1/EC, point 5.3(a)(iii) to (v), point 5.3(b), points 5.5 and 5.6, point 6.1(c), point 6.4(b) for activities not covered by Directive 2008/1/EC and points 6.10 and 6.11 which are in operation before 7 January 2013, Member States shall apply the laws, regulations and administrative provisions adopted in accordance with this Directive from 7 July 2015 with the exception of Chapters III and IV and Annexes V and VI.

3. In relation to combustion plants referred to in Article 30(2), Member States shall, from 1 January 2016, apply the laws, regulations and administrative provisions adopted in accordance with Article 80(1) to comply with Chapter III and Annex V.

4. In relation to combustion plants referred to in Article 30(3), Member States shall no longer apply Directive 2001/80/EC from 7 January 2013.

5. In relation to combustion plants which co-incinerate waste, point 3.1 of Part 4 of Annex VI shall apply until:

(a) 31 December 2015, for combustion plants referred to in Article 30(2);

(b) 7 January 2013, for combustion plants referred to in Article 30(3).

6. Point 3.2 of Part 4 of Annex VI shall apply in relation to combustion plants which co-incinerate waste, as from:

(a) 1 January 2016, for combustion plants referred to in Article 30(2)

(b) 7 January 2013, for combustion plants referred to in Article 30(3).

7. Article 58 shall apply from 1 June 2015. Until that date, substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No 1272/2008, are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or the risk phrases R45, R46, R49, R60 or R61, shall be replaced, as far as possible, by less harmful substances or mixtures within the shortest possible time.

8. Article 59(5) shall apply from 1 June 2015. Until that date, the emissions of either volatile organic compounds which are

assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or the risk phrases R45, R46, R49, R60 or R61 or halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351 or the risk phrases R40 or R68, shall be controlled under contained conditions, as far as technically and economically feasible, to safeguard public health and the environment and shall not exceed the relevant emission limit values set out in Part 4 of Annex VII.

9. Point 2 of Part 4 of Annex VII shall apply from 1 June 2015. Until that date, for emissions of halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351 or the risk phrases R40 or R68, where the mass flow of the sum of the compounds causing the hazard statements H341 or H351 or the labelling R40 or R68 is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm<sup>3</sup> shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

#### Article 83

#### Entry into force

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

#### Article 84

#### Addressees

This Directive is addressed to the Member States.

Done at Strasbourg, 24 November 2010.

For the European Parliament  
The President  
J. BUZEK

For the Council  
The President  
O. CHASTEL



## ANNEX I

**Categories of activities referred to in Article 10**

The threshold values given below generally refer to production capacities or outputs. Where several activities falling under the same activity description containing a threshold are operated in the same installation, the capacities of such activities are added together. For waste management activities, this calculation shall apply at the level of activities 5.1, 5.3(a) and 5.3(b).

The Commission shall establish guidance on:

- (a) the relationship between waste management activities described in this Annex and those described in Annexes I and II to Directive 2008/98/EC; and
- (b) the interpretation of the term 'industrial scale' regarding the description of chemical industry activities described in this Annex.

1. Energy industries

1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more

1.2. Refining of mineral oil and gas

1.3. Production of coke

1.4. Gasification or liquefaction of:

(a) coal;

(b) other fuels in installations with a total rated thermal input of 20 MW or more.

2. Production and processing of metals

2.1. Metal ore (including sulphide ore) roasting or sintering

2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour

2.3. Processing of ferrous metals:

(a) operation of hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour;

(b) operation of smitheries with hammers the energy of which exceeds 50 kilojoule per hammer, where the calorific power used exceeds 20 MW;

(c) application of protective fused metal coats with an input exceeding 2 tonnes of crude steel per hour.

2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day

2.5. Processing of non-ferrous metals:

(a) production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;

(b) melting, including the alloyage, of non-ferrous metals, including recovered products and operation of non-ferrous metal foundries, with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals.

2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m<sup>3</sup>

3. Mineral industry
  - 3.1. Production of cement, lime and magnesium oxide:
    - (a) production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day;
    - (b) production of lime in kilns with a production capacity exceeding 50 tonnes per day;
    - (c) production of magnesium oxide in kilns with a production capacity exceeding 50 tonnes per day.
  - 3.2. Production of asbestos or the manufacture of asbestos-based products
  - 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day
  - 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day
  - 3.5. Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m<sup>3</sup> and with a setting density per kiln exceeding 300 kg/m<sup>3</sup>

4. Chemical industry

For the purpose of this section, production within the meaning of the categories of activities contained in this section means the production on an industrial scale by chemical or biological processing of substances or groups of substances listed in points 4.1 to 4.6

- 4.1. Production of organic chemicals, such as:
  - (a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
  - (b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters and mixtures of esters, acetates, ethers, peroxides and epoxy resins;
  - (c) sulphurous hydrocarbons;
  - (d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;
  - (e) phosphorus-containing hydrocarbons;
  - (f) halogenic hydrocarbons;
  - (g) organometallic compounds;
  - (h) plastic materials (polymers, synthetic fibres and cellulose-based fibres);
  - (i) synthetic rubbers;
  - (j) dyes and pigments;
  - (k) surface-active agents and surfactants.
- 4.2. Production of inorganic chemicals, such as:
  - (a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;
  - (b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;

- (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;
  - (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;
  - (e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide.
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)
- 4.4. Production of plant protection products or of biocides
- 4.5. Production of pharmaceutical products including intermediates
- 4.6. Production of explosives
5. Waste management
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:
- (a) biological treatment;
  - (b) physico-chemical treatment;
  - (c) blending or mixing prior to submission to any of the other activities listed in points 5.1 and 5.2;
  - (d) repackaging prior to submission to any of the other activities listed in points 5.1 and 5.2;
  - (e) solvent reclamation/regeneration;
  - (f) recycling/reclamation of inorganic materials other than metals or metal compounds;
  - (g) regeneration of acids or bases;
  - (h) recovery of components used for pollution abatement;
  - (i) recovery of components from catalysts;
  - (j) oil re-refining or other reuses of oil;
  - (k) surface impoundment.
- 5.2. Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants:
- (a) for non-hazardous waste with a capacity exceeding 3 tonnes per hour;
  - (b) for hazardous waste with a capacity exceeding 10 tonnes per day.
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment <sup>(1)</sup>:
- (i) biological treatment;
  - (ii) physico-chemical treatment;
  - (iii) pre-treatment of waste for incineration or co-incineration;
  - (iv) treatment of slags and ashes;
  - (v) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

<sup>(1)</sup> OJ L 135, 30.5.1991, p. 40.

- (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC:
- (i) biological treatment;
  - (ii) pre-treatment of waste for incineration or co-incineration;
  - (iii) treatment of slags and ashes;
  - (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

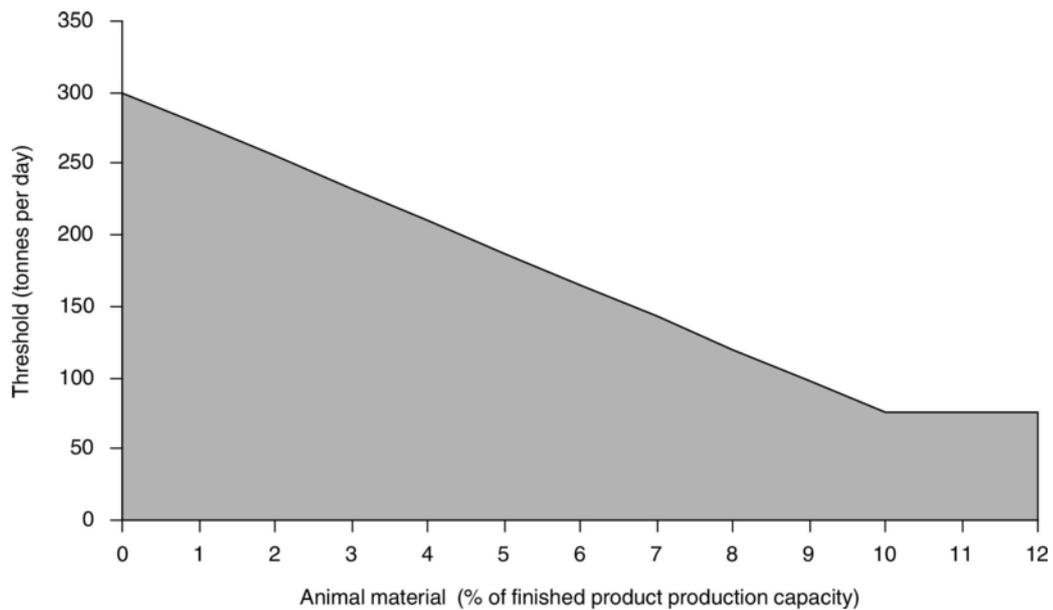
When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste <sup>(1)</sup>, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste
- 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated
- 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes
6. Other activities
- 6.1. Production in industrial installations of:
- (a) pulp from timber or other fibrous materials;
  - (b) paper or card board with a production capacity exceeding 20 tonnes per day;
  - (c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m<sup>3</sup> per day.
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day
- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day
- (b) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from:
- (i) only animal raw materials (other than exclusively milk) with a finished product production capacity greater than 75 tonnes per day;
  - (ii) only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day or 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year;
  - (iii) animal and vegetable raw materials, both in combined and separate products, with a finished product production capacity in tonnes per day greater than:
    - 75 if A is equal to 10 or more; or,
    - $[300 - (22,5 \times A)]$  in any other case,where 'A' is the portion of animal material (in percent of weight) of the finished product production capacity.

Packaging shall not be included in the final weight of the product.

<sup>(1)</sup> OJ L 182, 16.7.1999, p. 1.

This subsection shall not apply where the raw material is milk only.



- (c) Treatment and processing of milk only, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis).
- 6.5. Disposal or recycling of animal carcasses or animal waste with a treatment capacity exceeding 10 tonnes per day
- 6.6. Intensive rearing of poultry or pigs:
- with more than 40 000 places for poultry;
  - with more than 2 000 places for production pigs (over 30 kg), or
  - with more than 750 places for sows.
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year
- 6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation
- 6.9. Capture of CO<sub>2</sub> streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC
- 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m<sup>3</sup> per day other than exclusively treating against sapstain
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II

## ANNEX II

**List of polluting substances**

## AIR

1. Sulphur dioxide and other sulphur compounds
2. Oxides of nitrogen and other nitrogen compounds
3. Carbon monoxide
4. Volatile organic compounds
5. Metals and their compounds
6. Dust including fine particulate matter
7. Asbestos (suspended particulates, fibres)
8. Chlorine and its compounds
9. Fluorine and its compounds
10. Arsenic and its compounds
11. Cyanides
12. Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air
13. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans

## WATER

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment
  2. Organophosphorus compounds
  3. Organotin compounds
  4. Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment
  5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances
  6. Cyanides
  7. Metals and their compounds
  8. Arsenic and its compounds
  9. Biocides and plant protection products
  10. Materials in suspension
  11. Substances which contribute to eutrophication (in particular, nitrates and phosphates)
  12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.)
  13. Substances listed in Annex X to Directive 2000/60/EC
-

## ANNEX III

**Criteria for determining best available techniques**

1. the use of low-waste technology;
  2. the use of less hazardous substances;
  3. the furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate;
  4. comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;
  5. technological advances and changes in scientific knowledge and understanding;
  6. the nature, effects and volume of the emissions concerned;
  7. the commissioning dates for new or existing installations;
  8. the length of time needed to introduce the best available technique;
  9. the consumption and nature of raw materials (including water) used in the process and energy efficiency;
  10. the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;
  11. the need to prevent accidents and to minimise the consequences for the environment;
  12. information published by public international organisations.
-

## ANNEX IV

**Public participation in decision-making**

1. The public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:
    - (a) the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions in accordance with Article 21, including the description of the elements listed in Article 12(1);
    - (b) where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 26;
    - (c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;
    - (d) the nature of possible decisions or, where there is one, the draft decision;
    - (e) where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;
    - (f) an indication of the times and places where, or means by which, the relevant information will be made available;
    - (g) details of the arrangements for public participation and consultation made pursuant to point 5.
  2. Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:
    - (a) in accordance with national law, the main reports and advice issued to the competent authority or authorities at the time when the public concerned were informed in accordance with point 1;
    - (b) in accordance with Directive 2003/4/EC, information other than that referred to in point 1 which is relevant for the decision in accordance with Article 5 of this Directive and which only becomes available after the time the public concerned was informed in accordance with point 1.
  3. The public concerned shall be entitled to express comments and opinions to the competent authority before a decision is taken.
  4. The results of the consultations held pursuant to this Annex must be taken into due account in the taking of a decision.
  5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States. Reasonable time-frames for the different phases shall be provided, allowing sufficient time to inform the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to this Annex.
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## ANNEX V

## Technical provisions relating to combustion plants

## PART 1

*Emission limit values for combustion plants referred to in Article 30(2)*

- All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O<sub>2</sub> content of 6 % for solid fuels, 3 % for combustion plants, other than gas turbines and gas engines using liquid and gaseous fuels and 15 % for gas turbines and gas engines.
- Emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	250	200	300	250
> 300	200	200	200	200

Combustion plants, using solid fuels which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO<sub>2</sub> of 800 mg/Nm<sup>3</sup>.

Combustion plants using liquid fuels, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO<sub>2</sub> of 850 mg/Nm<sup>3</sup> in case of plants with a total rated thermal input not exceeding 300 MW and of 400 mg/Nm<sup>3</sup> in case of plants with a total rated thermal input greater than 300 MW.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding two paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

- Emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

Combustion plants, firing low calorific gases from gasification of refinery residues, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for SO<sub>2</sub> of 800 mg/Nm<sup>3</sup>.

4. Emission limit values ( $\text{mg}/\text{Nm}^3$ ) for  $\text{NO}_x$  for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 450 in case of pulverised lignite combustion	300	450
100-300	200	250	200 <sup>(1)</sup>
> 300	200	200	150 <sup>(1)</sup>

Note:

- (<sup>1</sup>) The emission limit value is  $450 \text{ mg}/\text{Nm}^3$  for the firing of distillation and conversion residues from the refining of crude-oil for own consumption in combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

Combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for  $\text{NO}_x$  of  $450 \text{ mg}/\text{Nm}^3$ .

Combustion plants using solid or liquid fuels with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for  $\text{NO}_x$  of  $450 \text{ mg}/\text{Nm}^3$ .

Combustion plants using solid fuels with a total rated thermal input greater than 500 MW, which were granted a permit before 1 July 1987 and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for  $\text{NO}_x$  of  $450 \text{ mg}/\text{Nm}^3$ .

Combustion plants using liquid fuels, with a total rated thermal input greater than 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for  $\text{NO}_x$  of  $400 \text{ mg}/\text{Nm}^3$ .

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding three paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

5. Gas turbines (including combined cycle gas turbines (CCGT)) using light and middle distillates as liquid fuels shall be subject to an emission limit value for  $\text{NO}_x$  of  $90 \text{ mg}/\text{Nm}^3$  and for CO of  $100 \text{ mg}/\text{Nm}^3$ .

Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm<sup>3</sup>) for NO<sub>x</sub> and CO for gas fired combustion plants

	NO <sub>x</sub>	CO
Combustion plants firing natural gas with the exception of gas turbines and gas engines	100	100
Combustion plants firing blast furnace gas, coke oven gas or low calorific gases from gasification of refinery residues, with the exception of gas turbines and gas engines	200 <sup>(4)</sup>	—
Combustion plants firing other gases, with the exception of gas turbines and gas engines	200 <sup>(4)</sup>	—
Gas turbines (including CCGT), using natural gas <sup>(1)</sup> as fuel	50 <sup>(2)</sup> <sup>(3)</sup>	100
Gas turbines (including CCGT), using other gases as fuel	120	—
Gas engines	100	100

## Notes:

- (1) Natural gas is naturally occurring methane with not more than 20 % (by volume) of inerts and other constituents.
- (2) 75 mg/Nm<sup>3</sup> in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:
- (i) gas turbines, used in combined heat and power systems having an overall efficiency greater than 75 %;
  - (ii) gas turbines used in combined cycle plants having an annual average overall electrical efficiency greater than 55 %;
  - (iii) gas turbines for mechanical drives.
- (3) For single cycle gas turbines not falling into any of the categories mentioned under note (2), but having an efficiency greater than 35 % – determined at ISO base load conditions – the emission limit value for NO<sub>x</sub> shall be 50η/35 where η is the gas turbine efficiency at ISO base load conditions expressed as a percentage.
- (4) 300 mg/Nm<sup>3</sup> for such combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

For gas turbines (including CCGT), the NO<sub>x</sub> and CO emission limit values set out in the table contained in this point apply only above 70 % load.

For gas turbines (including CCGT) which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the emission limit value for NO<sub>x</sub> is 150 mg/Nm<sup>3</sup> when firing natural gas and 200 mg/Nm<sup>3</sup> when firing other gases or liquid fuels.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding paragraph in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

7. Emission limit values (mg/Nm<sup>3</sup>) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels <sup>(1)</sup>
50-100	30	30	30
100-300	25	20	25
> 300	20	20	20

## Note:

- (1) The emission limit value is 50 mg/Nm<sup>3</sup> for the firing of distillation and conversion residues from the refining of crude oil for own consumption in combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

8. Emission limit values (mg/Nm<sup>3</sup>) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

## PART 2

*Emission limit values for combustion plants referred to in Article 30(3)*

1. All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O<sub>2</sub> content of 6 % for solid fuels, 3 % for combustion plants other than gas turbines and gas engines using liquid and gaseous fuels and 15 % for gas turbines and gas engines.

In case of combined cycle gas turbines with supplementary firing, the standardised O<sub>2</sub> content may be defined by the competent authority, taking into account the specific characteristics of the installation concerned.

2. Emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	200	200	300 250 in case of fluidised bed combustion	200
> 300	150 200 in case of circulating or pressurised fluidised bed combustion	150	150 200 in case of fluidised bed combustion	150

3. Emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

4. Emission limit values (mg/Nm<sup>3</sup>) for NO<sub>x</sub> for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 400 in case of pulverised lignite combustion	250	300
100-300	200	200	150
> 300	150 200 in case of pulverised lignite combustion	150	100

5. Gas turbines (including CCGT) using light and middle distillates as liquid fuels shall be subject to an emission limit value for NO<sub>x</sub> of 50 mg/Nm<sup>3</sup> and for CO of 100 mg/Nm<sup>3</sup>

Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm<sup>3</sup>) for NO<sub>x</sub> and CO for gas fired combustion plants

	NO <sub>x</sub>	CO
Combustion plants other than gas turbines and gas engines	100	100
Gas turbines (including CCGT)	50 <sup>(1)</sup>	100
Gas engines	75	100

Note:

<sup>(1)</sup> For single cycle gas turbines having an efficiency greater than 35 % – determined at ISO base load conditions – the emission limit value for NO<sub>x</sub> shall be  $50 \times \eta / 35$  where  $\eta$  is the gas turbine efficiency at ISO base load conditions expressed as a percentage.

For gas turbines (including CCGT), the NO<sub>x</sub> and CO emission limit values set out in this point apply only above 70 % load.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

7. Emission limit values (mg/Nm<sup>3</sup>) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	
50-300	20
> 300	10
	20 for biomass and peat

8. Emission limit values (mg/Nm<sup>3</sup>) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

### PART 3

#### *Emission monitoring*

1. The concentrations of SO<sub>2</sub>, NO<sub>x</sub> and dust in waste gases from each combustion plant with a total rated thermal input of 100 MW or more shall be measured continuously.

The concentration of CO in waste gases from each combustion plant firing gaseous fuels with a total rated thermal input of 100 MW or more shall be measured continuously.

2. The competent authority may decide not to require the continuous measurements referred to in point 1 in the following cases:

- (a) for combustion plants with a life span of less than 10 000 operational hours;
- (b) for SO<sub>2</sub> and dust from combustion plants firing natural gas;

- (c) for SO<sub>2</sub> from combustion plants firing oil with known sulphur content in cases where there is no waste gas desulphurisation equipment;
- (d) for SO<sub>2</sub> from combustion plants firing biomass if the operator can prove that the SO<sub>2</sub> emissions can under no circumstances be higher than the prescribed emission limit values.
3. Where continuous measurements are not required, measurements of SO<sub>2</sub>, NO<sub>x</sub>, dust and, for gas fired plants, also of CO shall be required at least once every 6 months.
  4. For combustion plants firing coal or lignite, the emissions of total mercury shall be measured at least once per year.
  5. As an alternative to the measurements of SO<sub>2</sub> and NO<sub>x</sub> referred to in point 3, other procedures, verified and approved by the competent authority, may be used to determine the SO<sub>2</sub> and NO<sub>x</sub> emissions. Such procedures shall use relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality.
  6. The competent authority shall be informed of significant changes in the type of fuel used or in the mode of operation of the plant. The competent authority shall decide whether the monitoring requirements laid down in points 1 to 4 are still adequate or require adaptation.
  7. The continuous measurements carried out in accordance with point 1 shall include the measurement of the oxygen content, temperature, pressure and water vapour content of the waste gases. The continuous measurement of the water vapour content of the waste gases shall not be necessary, provided that the sampled waste gas is dried before the emissions are analysed.
  8. Sampling and analysis of relevant polluting substances and measurements of process parameters as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate those systems shall be carried out in accordance with CEN standards. If CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality shall apply.

The automated measuring systems shall be subject to control by means of parallel measurements with the reference methods at least once per year.

The operator shall inform the competent authority about the results of the checking of the automated measuring systems.

9. At the emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide	10 %
Sulphur dioxide	20 %
Nitrogen oxides	20 %
Dust	30 %

10. The validated hourly and daily average values shall be determined from the measured valid hourly average values after having subtracted the value of the confidence interval specified in point 9.

Any day in which more than three hourly average values are invalid due to malfunction or maintenance of the automated measuring system shall be invalidated. If more than 10 days over a year are invalidated for such situations the competent authority shall require the operator to take adequate measures to improve the reliability of the automated measuring system.

11. In the case of plants which must comply with the rates of desulphurisation referred to in Article 31, the sulphur content of the fuel which is fired in the combustion plant shall also be regularly monitored. The competent authorities shall be informed of substantial changes in the type of fuel used.

## PART 4

*Assessment of compliance with emission limit values*

1. In the case of continuous measurements, the emission limit values set out in Parts 1 and 2 shall be regarded as having been complied with if the evaluation of the measurement results indicates, for operating hours within a calendar year, that all of the following conditions have been met:
  - (a) no validated monthly average value exceeds the relevant emission limit values set out in Parts 1 and 2;
  - (b) no validated daily average value exceeds 110 % of the relevant emission limit values set out in Parts 1 and 2;
  - (c) in cases of combustion plants composed only of boilers using coal with a total rated thermal input below 50 MW, no validated daily average value exceeds 150 % of the relevant emission limit values set out in Parts 1 and 2,
  - (d) 95 % of all the validated hourly average values over the year do not exceed 200 % of the relevant emission limit values set out in Parts 1 and 2.

The validated average values are determined as set out in point 10 of Part 3.

For the purpose of the calculation of the average emission values, the values measured during the periods referred to in Article 30(5) and (6) and Article 37 as well as during the start-up and shut-down periods shall be disregarded.

2. Where continuous measurements are not required, the emission limit values set out in Parts 1 and 2 shall be regarded as having been complied with if the results of each of the series of measurements or of the other procedures defined and determined according to the rules laid down by the competent authorities do not exceed the emission limit values.

## PART 5

*Minimum rate of desulphurisation*

1. Minimum rate of desulphurisation for combustion plants referred to in Article 30(2)

Total rated thermal input (MW)	Minimum rate of desulphurisation	
	Plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003	Other plants
50-100	80 %	92 %
100-300	90 %	92 %
> 300	96 % <sup>(1)</sup>	96 %

Note:

<sup>(1)</sup> For combustion plants firing oil shale, the minimum rate of desulphurisation is 95 %.

2. Minimum rate of desulphurisation for combustion plants referred to in Article 30(3)

Total rated thermal input (MW)	Minimum rate of desulphurisation
50-100	93 %
100-300	93 %
> 300	97 %

## PART 6

*Compliance with rate of desulphurisation*

The minimum rates of desulphurisation set out in Part 5 of this Annex shall apply as a monthly average limit value.

## PART 7

*Average emission limit values for multi-fuel firing combustion plants within a refinery*

Average emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> for multi-fuel firing combustion plants within a refinery, with the exception of gas turbines and gas engines, which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels:

- (a) for combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003: 1 000 mg/Nm<sup>3</sup>;
- (b) for other combustion plants: 600 mg/Nm<sup>3</sup>.

These emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O<sub>2</sub> content of 6 % for solid fuels and 3 % for liquid and gaseous fuels.



## ANNEX VI

**Technical provisions relating to waste incineration plants and waste co-incineration plants**

## PART 1

*Definitions*

For the purpose of this Annex the following definitions shall apply:

- (a) 'existing waste incineration plant' means one of the following waste incineration plants:
- (i) which was in operation and had a permit in accordance with applicable Union law before 28 December 2002,
  - (ii) which was authorised or registered for waste incineration and had a permit granted before 28 December 2002 in accordance with applicable Union law, provided that the plant was put into operation no later than 28 December 2003,
  - (iii) which, in the view of the competent authority, was the subject of a full request for authorisation before 28 December 2002, provided that the plant was put into operation not later than 28 December 2004;
- (b) 'new waste incineration plant' means any waste incineration plant not covered by point (a).

## PART 2

*Equivalence factors for dibenzo-p-dioxins and dibenzofurans*

For the determination of the total concentration of dioxins and furans, the mass concentrations of the following dibenzo-p-dioxins and dibenzofurans shall be multiplied by the following equivalence factors before summing:

	Toxic equivalence factor
2,3,7,8 — Tetrachlorodibenzodioxin (TCDD)	1
1,2,3,7,8 — Pentachlorodibenzodioxin (PeCDD)	0,5
1,2,3,4,7,8 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,6,7,8 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,7,8,9 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,4,6,7,8 — Heptachlorodibenzodioxin (HpCDD)	0,01
Octachlorodibenzodioxin (OCDD)	0,001
2,3,7,8 — Tetrachlorodibenzofuran (TCDF)	0,1
2,3,4,7,8 — Pentachlorodibenzofuran (PeCDF)	0,5
1,2,3,7,8 — Pentachlorodibenzofuran (PeCDF)	0,05
1,2,3,4,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,6,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,7,8,9 — Hexachlorodibenzofuran (HxCDF)	0,1
2,3,4,6,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,4,6,7,8 — Heptachlorodibenzofuran (HpCDF)	0,01
1,2,3,4,7,8,9 — Heptachlorodibenzofuran (HpCDF)	0,01
Octachlorodibenzofuran (OCDF)	0,001

## PART 3

*Air emission limit values for waste incineration plants*

1. All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correcting for the water vapour content of the waste gases.

They are standardised at 11 % oxygen in waste gas except in case of incineration of mineral waste oil as defined in point 3 of Article 3 of Directive 2008/98/EC, when they are standardised at 3 % oxygen, and in the cases referred to in Point 2.7 of Part 6.

- 1.1. Daily average emission limit values for the following polluting substances (mg/Nm<sup>3</sup>)

Total dust	10
Gaseous and vaporous organic substances, expressed as total organic carbon (TOC)	10
Hydrogen chloride (HCl)	10
Hydrogen fluoride (HF)	1
Sulphur dioxide (SO <sub>2</sub> )	50
Nitrogen monoxide (NO) and nitrogen dioxide (NO <sub>2</sub> ), expressed as NO <sub>2</sub> for existing waste incineration plants with a nominal capacity exceeding 6 tonnes per hour or new waste incineration plants	200
Nitrogen monoxide (NO) and nitrogen dioxide (NO <sub>2</sub> ), expressed as NO <sub>2</sub> for existing waste incineration plants with a nominal capacity of 6 tonnes per hour or less	400

- 1.2. Half-hourly average emission limit values for the following polluting substances (mg/Nm<sup>3</sup>)

	(100 %) A	(97 %) B
Total dust	30	10
Gaseous and vaporous organic substances, expressed as total organic carbon (TOC)	20	10
Hydrogen chloride (HCl)	60	10
Hydrogen fluoride (HF)	4	2
Sulphur dioxide (SO <sub>2</sub> )	200	50
Nitrogen monoxide (NO) and nitrogen dioxide (NO <sub>2</sub> ), expressed as NO <sub>2</sub> for existing waste incineration plants with a nominal capacity exceeding 6 tonnes per hour or new waste incineration plants	400	200

- 1.3. Average emission limit values (mg/Nm<sup>3</sup>) for the following heavy metals over a sampling period of a minimum of 30 minutes and a maximum of 8 hours

Cadmium and its compounds, expressed as cadmium (Cd)	Total: 0,05
Thallium and its compounds, expressed as thallium (Tl)	
Mercury and its compounds, expressed as mercury (Hg)	0,05
Antimony and its compounds, expressed as antimony (Sb)	Total: 0,5
Arsenic and its compounds, expressed as arsenic (As)	
Lead and its compounds, expressed as lead (Pb)	
Chromium and its compounds, expressed as chromium (Cr)	
Cobalt and its compounds, expressed as cobalt (Co)	
Copper and its compounds, expressed as copper (Cu)	
Manganese and its compounds, expressed as manganese (Mn)	
Nickel and its compounds, expressed as nickel (Ni)	
Vanadium and its compounds, expressed as vanadium (V)	

These average values cover also the gaseous and the vapour forms of the relevant heavy metal emissions as well as their compounds.

- 1.4. Average emission limit value (ng/Nm<sup>3</sup>) for dioxins and furans over a sampling period of a minimum of 6 hours and a maximum of 8 hours. The emission limit value refers to the total concentration of dioxins and furans calculated in accordance with Part 2.

Dioxins and furans	0,1
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- 1.5. Emission limit values (mg/Nm<sup>3</sup>) for carbon monoxide (CO) in the waste gases:

- (a) 50 as daily average value;
- (b) 100 as half-hourly average value;
- (c) 150 as 10-minute average value.

The competent authority may authorise exemptions from the emission limit values set out in this point for waste incineration plants using fluidised bed technology, provided that the permit sets an emission limit value for carbon monoxide (CO) of not more than 100 mg/Nm<sup>3</sup> as an hourly average value.

2. Emission limit values applicable in the circumstances described in Article 46(6) and Article 47.

The total dust concentration in the emissions into the air of a waste incineration plant shall under no circumstances exceed 150 mg/Nm<sup>3</sup> expressed as a half-hourly average. The air emission limit values for TOC and CO set out in points 1.2 and 1.5(b) shall not be exceeded.

3. Member States may lay down rules governing the exemptions provided for in this Part.

#### PART 4

##### *Determination of air emission limit values for the co-incineration of waste*

1. The following formula (mixing rule) shall be applied whenever a specific total emission limit value 'C' has not been set out in a table in this Part.

The emission limit value for each relevant polluting substance and CO in the waste gas resulting from the co-incineration of waste shall be calculated as follows:

$$\frac{V_{\text{waste}} \times C_{\text{waste}} + V_{\text{proc}} \times C_{\text{proc}}}{V_{\text{waste}} + C_{\text{proc}}} = C$$

$V_{\text{waste}}$ : waste gas volume resulting from the incineration of waste only determined from the waste with the lowest calorific value specified in the permit and standardised at the conditions given by this Directive.

If the resulting heat release from the incineration of hazardous waste amounts to less than 10 % of the total heat released in the plant,  $V_{\text{waste}}$  must be calculated from a (notional) quantity of waste that, being incinerated, would equal 10 % heat release, the total heat release being fixed.

$C_{\text{waste}}$ : emission limit values for waste incineration plants set out in Part 3

$V_{\text{proc}}$ : waste gas volume resulting from the plant process including the combustion of the authorised fuels normally used in the plant (wastes excluded) determined on the basis of oxygen contents at which the emissions must be standardised as set out in Union or national law. In the absence of legislation for this kind of plant, the real oxygen content in the waste gas without being thinned by addition of air unnecessary for the process must be used.

$C_{\text{proc}}$ : emission limit values as set out in this Part for certain industrial activities or in case of the absence of such values, emission limit values of plants which comply with the national laws, regulations and administrative provisions for such plants while burning the normally authorised fuels (wastes excluded). In the absence of these measures the emission limit values set out in the permit are used. In the absence of such permit values the real mass concentrations are used.

C: total emission limit values at an oxygen content as set out in this Part for certain industrial activities and certain polluting substances or, in case of the absence of such values, total emission limit values replacing the emission limit values as set out in specific Annexes of this Directive. The total oxygen content to replace the oxygen content for the standardisation is calculated on the basis of the content above respecting the partial volumes.

All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correcting for the water vapour content of the waste gases.

Member States may lay down rules governing the exemptions provided for in this Part.

## 2. Special provisions for cement kilns co-incinerating waste

2.1. The emission limit values set out in points 2.2 and 2.3 apply as daily average values for total dust, HCl, HF, NO<sub>x</sub>, SO<sub>2</sub> and TOC (for continuous measurements), as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours for heavy metals and as average values over the sampling period of a minimum of 6 hours and a maximum of 8 hours for dioxins and furans.

All values are standardised at 10 % oxygen.

Half-hourly average values shall only be needed in view of calculating the daily average values.

2.2. C – total emission limit values (mg/Nm<sup>3</sup> except for dioxins and furans) for the following –polluting substances

Polluting substance	C
Total dust	30
HCl	10
HF	1
NO <sub>x</sub>	500 <sup>(1)</sup>
Cd + Tl	0,05
Hg	0,05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0,5
Dioxins and furans (ng/Nm <sup>3</sup> )	0,1

<sup>(1)</sup> Until 1 January 2016, the competent authority may authorise exemptions from the limit value for NO<sub>x</sub> for Lepol kilns and long rotary kilns provided that the permit sets a total emission limit value for NO<sub>x</sub> of not more than 800 mg/Nm<sup>3</sup>.

2.3. C – total emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub> and TOC

Pollutant	C
SO <sub>2</sub>	50
TOC	10

The competent authority may grant derogations for emission limit values set out in this point in cases where TOC and SO<sub>2</sub> do not result from the co-incineration of waste.

2.4. C- total emission limit values for CO

The competent authority may set emission limit values for CO.

## 3. Special provisions for combustion plants co-incinerating waste

3.1. C<sub>proc</sub> expressed as daily average values (mg/Nm<sup>3</sup>) valid until the date set out in Article 82(5)

For determining the total rated thermal input of the combustion plants, the aggregation rules as defined in Article 29 shall apply. Half-hourly average values shall only be needed in view of calculating the daily average values.

$C_{\text{proc}}$  for solid fuels with the exception of biomass ( $O_2$  content 6 %):

Polluting substances	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	850	200	200
NO <sub>x</sub>	—	400	200	200
Dust	50	50	30	30

$C_{\text{proc}}$  for biomass ( $O_2$  content 6 %):

Polluting substances	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	200	200	200
NO <sub>x</sub>	—	350	300	200
Dust	50	50	30	30

$C_{\text{proc}}$  for liquid fuels ( $O_2$  content 3 %):

Polluting substances	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	850	400 to 200 (linear decrease from 100 to 300 MWth)	200
NO <sub>x</sub>	—	400	200	200
Dust	50	50	30	30

### 3.2. $C_{\text{proc}}$ expressed as daily average values (mg/Nm<sup>3</sup>) valid from the date set out in Article 82(6)

For determining the total rated thermal input of the combustion plants, the aggregation rules as defined in Article 29 shall apply. Half-hourly average values shall only be needed in view of calculating the daily average values.

#### 3.2.1. $C_{\text{proc}}$ for combustion plants referred to in Article 30(2), with the exception of gas turbines and gas engines

$C_{\text{proc}}$  for solid fuels with the exception of biomass ( $O_2$  content 6 %):

Polluting substance	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	400 for peat: 300	200	200
NO <sub>x</sub>	—	300 for pulverised lignite: 400	200	200
Dust	50	30	25 for peat: 20	20

$C_{\text{proc}}$  for biomass ( $O_2$  content 6 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	200	200	200
NO <sub>x</sub>	—	300	250	200
Dust	50	30	20	20

$C_{\text{proc}}$  for liquid fuels ( $O_2$  content 3 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO <sub>2</sub>	—	350	250	200
NO <sub>x</sub>	—	400	200	150
Dust	50	30	25	20

3.2.2.  $C_{\text{proc}}$  for combustion plants referred to in Article 30(3), with the exception of gas turbines and gas engines $C_{\text{proc}}$  for solid fuels with the exception of biomass ( $O_2$  content 6 %):

Polluting substance	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
$SO_2$	—	400 for peat: 300	200 for peat: 300, except in the case of fluidised bed combustion: 250	150 for circulating or pressurised fluidised bed combustion or, in case of peat firing, for all fluidised bed combustion: 200
$NO_x$	—	300 for peat: 250	200	150 for pulverised lignite combustion: 200
Dust	50	20	20	10 for peat: 20

 $C_{\text{proc}}$  for biomass ( $O_2$  content 6 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
$SO_2$	—	200	200	150
$NO_x$	—	250	200	150
Dust	50	20	20	20

 $C_{\text{proc}}$  for liquid fuels ( $O_2$  content 3 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
$SO_2$	—	350	200	150
$NO_x$	—	300	150	100
Dust	50	20	20	10

3.3. C — total emission limit values for heavy metals ( $mg/Nm^3$ ) expressed as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours ( $O_2$  content 6 % for solid fuels and 3 % for liquid fuels)

Polluting substances	C
Cd + Tl	0,05
Hg	0,05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0,5

3.4. C — total emission limit value ( $ng/Nm^3$ ) for dioxins and furans expressed as average value measured over the sampling period of a minimum of 6 hours and a maximum of 8 hours ( $O_2$  content 6 % for solid fuels and 3 % for liquid fuels)

Polluting substance	C
Dioxins and furans	0,1

## 4. Special provisions for waste co-incineration plants in industrial sectors not covered under Points 2 and 3 of this Part

- 4.1. C — total emission limit value ( $\text{ng}/\text{Nm}^3$ ) for dioxins and furans expressed as average value measured over the sampling period of a minimum of 6 hours and a maximum of 8 hours:

Polluting substance	C
Dioxins and furans	0,1

- 4.2. C – total emission limit values ( $\text{mg}/\text{Nm}^3$ ) for heavy metals expressed as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours:

Polluting substances	C
Cd + Tl	0,05
Hg	0,05

## PART 5

*Emission limit values for discharges of waste water from the cleaning of waste gases*

Polluting substances	Emission limit values for unfiltered samples ( $\text{mg}/\text{l}$ except for dioxins and furans)	
	(95 %)	(100 %)
1. Total suspended solids as defined in Annex I of Directive 91/271/EEC	30	45
2. Mercury and its compounds, expressed as mercury (Hg)		0,03
3. Cadmium and its compounds, expressed as cadmium (Cd)		0,05
4. Thallium and its compounds, expressed as thallium (Tl)		0,05
5. Arsenic and its compounds, expressed as arsenic (As)		0,15
6. Lead and its compounds, expressed as lead (Pb)		0,2
7. Chromium and its compounds, expressed as chromium (Cr)		0,5
8. Copper and its compounds, expressed as copper (Cu)		0,5
9. Nickel and its compounds, expressed as nickel (Ni)		0,5
10. Zinc and its compounds, expressed as zinc (Zn)		1,5
11. Dioxins and furans		0,3 $\text{ng}/\text{l}$

## PART 6

*Monitoring of emissions*

1. Measurement techniques
  - 1.1. Measurements for the determination of concentrations of air and water polluting substances shall be carried out representatively.
  - 1.2. Sampling and analysis of all polluting substances including dioxins and furans as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate them shall be carried out according to CEN-standards. If CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality shall apply. Automated measuring systems shall be subject to control by means of parallel measurements with the reference methods at least once per year.

- 1.3. At the daily emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide:	10 %
Sulphur dioxide:	20 %
Nitrogen dioxide:	20 %
Total dust:	30 %
Total organic carbon:	30 %
Hydrogen chloride:	40 %
Hydrogen fluoride:	40 %.

Periodic measurements of the emissions into air and water shall be carried out in accordance with points 1.1 and 1.2.

2. Measurements relating to air polluting substances

2.1. The following measurements relating to air polluting substances shall be carried out:

- (a) continuous measurements of the following substances: NO<sub>x</sub>, provided that emission limit values are set, CO, total dust, TOC, HCl, HF, SO<sub>2</sub>;
- (b) continuous measurements of the following process operation parameters: temperature near the inner wall or at another representative point of the combustion chamber as authorised by the competent authority, concentration of oxygen, pressure, temperature and water vapour content of the waste gas;
- (c) at least two measurements per year of heavy metals and dioxins and furans; one measurement at least every 3 months shall, however, be carried out for the first 12 months of operation.

2.2. The residence time as well as the minimum temperature and the oxygen content of the waste gases shall be subject to appropriate verification, at least once when the waste incineration plant or waste co-incineration plant is brought into service and under the most unfavourable operating conditions anticipated.

2.3. The continuous measurement of HF may be omitted if treatment stages for HCl are used which ensure that the emission limit value for HCl is not being exceeded. In that case the emissions of HF shall be subject to periodic measurements as laid down in point 2.1(c).

2.4. The continuous measurement of the water vapour content shall not be required if the sampled waste gas is dried before the emissions are analysed.

2.5. The competent authority may decide not to require continuous measurements for HCl, HF and SO<sub>2</sub> in waste incineration plants or waste co-incineration plants and require periodic measurements as set out in point 2.1(c) or no measurements if the operator can prove that the emissions of those pollutants can under no circumstances be higher than the prescribed emission limit values.

The competent authority may decide not to require continuous measurements for NO<sub>x</sub> and require periodic measurements as set out in point 2.1(c) in existing waste incineration plants with a nominal capacity of less than 6 tonnes per hour or in existing waste co-incineration plants with a nominal capacity of less than 6 tonnes per hour if the operator can prove on the basis of information on the quality of the waste concerned, the technologies used and the results of the monitoring of emissions, that the emissions of NO<sub>x</sub> can under no circumstances be higher than the prescribed emission limit value.

2.6. The competent authority may decide to require one measurement every 2 years for heavy metals and one measurement per year for dioxins and furans in the following cases:

- (a) the emissions resulting from co-incineration or incineration of waste are under all circumstances below 50 % of the emission limit values;
- (b) the waste to be co-incinerated or incinerated consists only of certain sorted combustible fractions of non-hazardous waste not suitable for recycling and presenting certain characteristics, and which is further specified on the basis of the assessment referred to in point (c);



- (c) the operator can prove on the basis of information on the quality of the waste concerned and the monitoring of the emissions that the emissions are under all circumstances significantly below the emission limit values for heavy metals and dioxins and furans.
- 2.7. The results of the measurements shall be standardised using the standard oxygen concentrations mentioned in Part 3 or calculated according to Part 4 and by applying the formula given in Part 7.

When waste is incinerated or co-incinerated in an oxygen-enriched atmosphere, the results of the measurements can be standardised at an oxygen content laid down by the competent authority reflecting the special circumstances of the individual case.

When the emissions of polluting substances are reduced by waste gas treatment in a waste incineration plant or waste co-incineration plant treating hazardous waste, the standardisation with respect to the oxygen contents provided for in the first subparagraph shall be done only if the oxygen content measured over the same period as for the polluting substance concerned exceeds the relevant standard oxygen content.

3. Measurements relating to water polluting substances
- 3.1. The following measurements shall be carried out at the point of waste water discharge:
- (a) continuous measurements of pH, temperature and flow;
  - (b) spot sample daily measurements of total suspended solids or measurements of a flow proportional representative sample over a period of 24 hours;
  - (c) at least monthly measurements of a flow proportional representative sample of the discharge over a period of 24 hours of Hg, Cd, Tl, As, Pb, Cr, Cu, Ni and Zn;
  - (d) at least every 6 months measurements of dioxins and furans; however, one measurement at least every 3 months shall be carried out for the first 12 months of operation.
- 3.2. Where the waste water from the cleaning of waste gases is treated on site collectively with other on-site sources of waste water, the operator shall take the measurements:
- (a) on the waste water stream from the waste gas cleaning processes prior to its input into the collective waste water treatment plant;
  - (b) on the other waste water stream or streams prior to its or their input into the collective waste water treatment plant;
  - (c) at the point of final waste water discharge, after the treatment, from the waste incineration plant or waste co-incineration plant.

#### PART 7

*Formula to calculate the emission concentration at the standard percentage oxygen concentration*

$$E_S = \frac{21 - O_S}{21 - O_M} \times E_M$$

$E_S$  = calculated emission concentration at the standard percentage oxygen concentration

$E_M$  = measured emission concentration

$O_S$  = standard oxygen concentration

$O_M$  = measured oxygen concentration

#### PART 8

*Assessment of compliance with emission limit values*

1. Air emission limit values
- 1.1. The emission limit values for air shall be regarded as being complied with if:
- (a) none of the daily average values exceeds any of the emission limit values set out in point 1.1 of Part 3 or in Part 4 or calculated in accordance with Part 4;

- (b) either none of the half-hourly average values exceeds any of the emission limit values set out in column A of the table under point 1.2 of Part 3 or, where relevant, 97 % of the half-hourly average values over the year do not exceed any of the emission limit values set out in column B of the table under point 1.2 of Part 3;
- (c) none of the average values over the sampling period set out for heavy metals and dioxins and furans exceeds the emission limit values set out in points 1.3 and 1.4 of Part 3 or in Part 4 or calculated in accordance with Part 4;
- (d) for carbon monoxide (CO):
  - (i) in case of waste incineration plants:
    - at least 97 % of the daily average values over the year do not exceed the emission limit value set out in point 1.5(a) of Part 3; and,
    - at least 95 % of all 10-minute average values taken in any 24-hour period or all of the half-hourly average values taken in the same period do not exceed the emission limit values set out in points 1.5(b) and (c) of Part 3; in case of waste incineration plants in which the gas resulting from the incineration process is raised to a temperature of at least 1 100 °C for at least two seconds, Member States may apply an evaluation period of 7 days for the 10-minute average values;
  - (ii) in case of waste co-incineration plants: the provisions of Part 4 are met.

- 1.2. The half-hourly average values and the 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods if no waste is being incinerated) from the measured values after having subtracted the value of the confidence interval specified in point 1.3 of Part 6. The daily average values shall be determined from those validated average values.

To obtain a valid daily average value no more than five half-hourly average values in any day shall be discarded due to malfunction or maintenance of the continuous measurement system. No more than ten daily average values per year shall be discarded due to malfunction or maintenance of the continuous measurement system.

- 1.3. The average values over the sampling period and the average values in the case of periodical measurements of HF, HCl and SO<sub>2</sub> shall be determined in accordance with the requirements of Articles 45(1)(e), 48(3) and point 1 of Part 6.
2. Water emission limit values

The emission limit values for water shall be regarded as being complied with if:

- (a) for total suspended solids 95 % and 100 % of the measured values do not exceed the respective emission limit values as set out in Part 5;
- (b) for heavy metals (Hg, Cd, Tl, As, Pb, Cr, Cu, Ni and Zn) no more than one measurement per year exceeds the emission limit values set out in Part 5; or, if the Member State provides for more than 20 samples per year, no more than 5 % of these samples exceed the emission limit values set out in Part 5;
- (c) for dioxins and furans, the measurement results do not exceed the emission limit value set out in Part 5.

## ANNEX VII

**Technical provisions relating to installations and activities using organic solvents**

## PART 1

*Activities*

1. In each of the following points, the activity includes the cleaning of the equipment but not the cleaning of products unless specified otherwise.

2. Adhesive coating

Any activity in which an adhesive is applied to a surface, with the exception of adhesive coating and laminating associated with printing activities.

3. Coating activity

Any activity in which a single or multiple application of a continuous film of a coating is applied to:

- (a) either of the following vehicles:
  - (i) new cars, defined as vehicles of category M1 in Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles <sup>(1)</sup> and of category N1 in so far as they are coated at the same installation as M1 vehicles;
  - (ii) truck cabs, defined as the housing for the driver, and all integrated housing for the technical equipment, of vehicles of categories N2 and N3 in Directive 2007/46/EC;
  - (iii) vans and trucks, defined as vehicles of categories N1, N2 and N3 in Directive 2007/46/EC, but not including truck cabs;
  - (iv) buses, defined as vehicles of categories M2 and M3 in Directive 2007/46/EC;
  - (v) trailers, defined in categories O1, O2, O3 and O4 in Directive 2007/46/EC;
- (b) metallic and plastic surfaces including surfaces of airplanes, ships, trains, etc.;
- (c) wooden surfaces;
- (d) textile, fabric, film and paper surfaces;
- (e) leather.

Coating activities do not include the coating of substrate with metals by electrophoretic and chemical spraying techniques. If the coating activity includes a step in which the same article is printed by whatever technique used, that printing step is considered part of the coating activity. However, printing activities operated as a separate activity are not included, but may be covered by Chapter V of this Directive if the printing activity falls within the scope thereof.

4. Coil coating

Any activity where coiled steel, stainless steel, coated steel, copper alloys or aluminium strip is coated with either a film forming or laminate coating in a continuous process.

<sup>(1)</sup> OJ L 263, 9.10.2007, p. 1.

## 5. Dry cleaning

Any industrial or commercial activity using volatile organic compounds in an installation to clean garments, furnishing and similar consumer goods with the exception of the manual removal of stains and spots in the textile and clothing industry.

## 6. Footwear manufacture

Any activity of producing complete footwear or parts thereof.

## 7. Manufacturing of coating mixtures, varnishes, inks and adhesives

The manufacture of the above final products, and of intermediates where carried out at the same site, by mixing of pigments, resins and adhesive materials with organic solvent or other carrier, including dispersion and predispersion activities, viscosity and tint adjustments and operations for filling the final product into its container.

## 8. Manufacturing of pharmaceutical products

The chemical synthesis, fermentation, extraction, formulation and finishing of pharmaceutical products and, where carried out at the same site, the manufacture of intermediate products.

## 9. Printing

Any reproduction activity of text and/or images in which, with the use of an image carrier, ink is transferred onto whatever type of surface. It includes associated varnishing, coating and laminating techniques. However, only the following sub-processes are subject to Chapter V:

- (a) flexography – a printing activity using an image carrier of rubber or elastic photopolymers on which the printing areas are above the non-printing areas, using liquid inks which dry through evaporation;
- (b) heatset web offset – a web-fed printing activity using an image carrier in which the printing and non-printing area are in the same plane, where web-fed means that the material to be printed is fed to the machine from a reel as distinct from separate sheets. The non-printing area is treated to attract water and thus reject ink. The printing area is treated to receive and transmit ink to the surface to be printed. Evaporation takes place in an oven where hot air is used to heat the printed material;
- (c) laminating associated to a printing activity – the adhering together of two or more flexible materials to produce laminates;
- (d) publication rotogravure – a rotogravure printing activity used for printing paper for magazines, brochures, catalogues or similar products, using toluene-based inks;
- (e) rotogravure – a printing activity using a cylindrical image carrier in which the printing area is below the non-printing area, using liquid inks which dry through evaporation. The recesses are filled with ink and the surplus is cleaned off the non-printing area before the surface to be printed contacts the cylinder and lifts the ink from the recesses;
- (f) rotary screen printing – a web-fed printing activity in which the ink is passed onto the surface to be printed by forcing it through a porous image carrier, in which the printing area is open and the non-printing area is sealed off, using liquid inks which dry only through evaporation. Web-fed means that the material to be printed is fed into the machine from a reel as distinct from separate sheets;
- (g) varnishing – an activity by which a varnish or an adhesive coating for the purpose of later sealing the packaging material is applied to a flexible material.

## 10. Rubber conversion

Any activity of mixing, milling, blending, calendering, extrusion and vulcanisation of natural or synthetic rubber and any ancillary operations for converting natural or synthetic rubber into a finished product.

## 11. Surface cleaning

Any activity except dry cleaning using organic solvents to remove contamination from the surface of material including degreasing. A cleaning activity consisting of more than one step before or after any other activity shall be considered as one surface cleaning activity. This activity does not refer to the cleaning of the equipment but to the cleaning of the surface of products.

## 12. Vegetable oil and animal fat extraction and vegetable oil refining activities

Any activity to extract vegetable oil from seeds and other vegetable matter, the processing of dry residues to produce animal feed, the purification of fats and vegetable oils derived from seeds, vegetable matter and/or animal matter.

## 13. Vehicle refinishing

Any industrial or commercial coating activity and associated degreasing activities performing either of the following:

- (a) the original coating of road vehicles as defined in Directive 2007/46/EC or part of them with refinishing-type materials, where this is carried out away from the original manufacturing line;
- (b) the coating of trailers (including semi-trailers) (category O in Directive 2007/46/EC).

## 14. Winding wire coating

Any coating activity of metallic conductors used for winding the coils in transformers and motors, etc.

## 15. Wood impregnation

Any activity giving a loading of preservative in timber.

## 16. Wood and plastic lamination

Any activity to adhere together wood and/or plastic to produce laminated products.

## PART 2

## Thresholds and emission limit values

The emission limit values in waste gases shall be calculated at a temperature of 273,15 K, and a pressure of 101,3 kPa.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm <sup>3</sup> )	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
1	Heatset web offset printing (> 15)	15—25	100	30 <sup>(1)</sup>				<sup>(1)</sup> Solvent residue in finished product is not to be considered as part of fugitive emissions.
		> 25	20	30 <sup>(1)</sup>				
2	Publication rotogravure (> 25)		75	10	15			
3	Other rotogravure, flexography, rotary screen printing, laminating or varnishing units (> 15) rotary screen printing on textile/cardboard (> 30)	15—25	100	25				<sup>(1)</sup> Threshold for rotary screen printing on textile and on cardboard.
		> 25	100	20				
		> 30 <sup>(1)</sup>	100	20				
4	Surface cleaning using compounds specified in Article 59(5). (> 1)	1—5	20 <sup>(1)</sup>	15				<sup>(1)</sup> Limit value refers to mass of compounds in mg/Nm <sup>3</sup> , and not to total carbon.
		> 5	20 <sup>(1)</sup>	10				
5	Other surface cleaning (> 2)	2—10	75 <sup>(1)</sup>	20 <sup>(1)</sup>				<sup>(1)</sup> Installations which demonstrate to the competent authority that the average organic solvent content of all cleaning material used does not exceed 30 % by weight are exempt from application of these values.
		> 10	75 <sup>(1)</sup>	15 <sup>(1)</sup>				
6	Vehicle coating (< 15) and vehicle refinishing	> 0,5	50 <sup>(1)</sup>	25				<sup>(1)</sup> Compliance in accordance with point 2 of Part 8 shall be demonstrated based on 15 minute average measurements.
7	Coil coating (> 25)		50 <sup>(1)</sup>	5	10			<sup>(1)</sup> For installations which use techniques which allow reuse of recovered solvents, the emission limit value shall be 150.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm <sup>3</sup> )	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
8	Other coating, including metal, plastic, textile <sup>(5)</sup> , fabric, film and paper coating (> 5)	5—15 > 15	100 <sup>(1)</sup> <sup>(4)</sup> 50/75 <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>		25 <sup>(4)</sup> 20 <sup>(4)</sup>			<p><sup>(1)</sup> Emission limit value applies to coating application and drying processes operated under contained conditions.</p> <p><sup>(2)</sup> The first emission limit value applies to drying processes, the second to coating application processes.</p> <p><sup>(3)</sup> For textile coating installations which use techniques which allow reuse of recovered solvents, the emission limit value applied to coating application and drying processes taken together shall be 150.</p> <p><sup>(4)</sup> Coating activities which cannot be carried out under contained conditions (such as shipbuilding, aircraft painting) may be exempted from these values, in accordance with Article 59(3).</p> <p><sup>(5)</sup> Rotary screen printing on textile is covered by activity No 3.</p>
9	Winding wire coating (> 5)					10 g/kg <sup>(1)</sup> 5 g/kg <sup>(2)</sup>		<p><sup>(1)</sup> Applies for installations where average diameter of wire ≤ 0,1 mm.</p> <p><sup>(2)</sup> Applies for all other installations.</p>
10	Coating of wooden surfaces (> 15)	15—25 > 25	100 <sup>(1)</sup> 50/75 <sup>(2)</sup>		25 20			<p><sup>(1)</sup> Emission limit value applies to coating application and drying processes operated under contained conditions.</p> <p><sup>(2)</sup> The first value applies to drying processes, the second to coating application processes.</p>
11	Dry cleaning					20 g/kg <sup>(1)</sup> <sup>(2)</sup>		<p><sup>(1)</sup> Expressed in mass of solvent emitted per kilogram of product cleaned and dried.</p> <p><sup>(2)</sup> The emission limit value in point 2 of Part 4 does not apply for this activity.</p>

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm <sup>3</sup> )	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
12	Wood impregnation (> 25)		100 <sup>(1)</sup>		45	11 kg/m <sup>3</sup>		<sup>(1)</sup> Emission limit value does not apply for impregnation with creosote.
13	Coating of leather (> 10)	10—25 > 25 > 10 <sup>(1)</sup>				85 g/m <sup>2</sup> 75 g/m <sup>2</sup> 150 g/m <sup>2</sup>		Emission limit values are expressed in grams of solvent emitted per m <sup>2</sup> of product produced.  <sup>(1)</sup> For leather coating activities in furnishing and particular leather goods used as small consumer goods like bags, belts, wallets, etc.
14	Footwear manufacture (> 5)					25 g per pair		Total emission limit value is expressed in grams of solvent emitted per pair of complete footwear produced.
15	Wood and plastic lamination (> 5)					30 g/m <sup>2</sup>		
16	Adhesive coating (> 5)	5—15 > 15	50 <sup>(1)</sup> 50 <sup>(1)</sup>		25 20			<sup>(1)</sup> If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.
17	Manufacture of coating mixture, varnishes, inks and adhesives (> 100)	100—1 000 > 1 000	150 150		5 3	5 % of solvent input 3 % of solvent input		The fugitive emission limit value does not include solvent sold as part of a coatings mixture in a sealed container.
18	Rubber conversion (> 15)		20 <sup>(1)</sup>		25 <sup>(2)</sup>	25 % of solvent input		<sup>(1)</sup> If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.  <sup>(2)</sup> The fugitive emission limit value does not include solvent sold as part of products or mixtures in a sealed container.



	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm <sup>3</sup> )	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
19	Vegetable oil and animal fat extraction and vegetable oil refining activities (> 10)					Animal fat: 1,5 kg/tonne Castor: 3 kg/tonne Rape seed: 1 kg/tonne Sunflower seed: 1 kg/tonne Soya beans (normal crush): 0,8 kg/tonne Soya beans (white flakes): 1,2 kg/tonne Other seeds and other vegetable matter: 3 kg/tonne <sup>(1)</sup> 1,5 kg/tonne <sup>(2)</sup> 4 kg/tonne <sup>(3)</sup>		<sup>(1)</sup> Total emission limit values for installations processing individual batches of seeds and other vegetable matter should be set by the competent authority on a case-by-case basis, applying the best available techniques. <sup>(2)</sup> Applies to all fractionation processes excluding de-gumming (the removal of gums from the oil). <sup>(3)</sup> Applies to de-gumming.
20	Manufacturing of pharmaceutical products (> 50)		20 <sup>(1)</sup>	5 <sup>(2)</sup>	15 <sup>(2)</sup>	5 % of solvent input 15 % of solvent input		<sup>(1)</sup> If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150. <sup>(2)</sup> The fugitive emission limit value does not include solvent sold as part of products or mixtures in a sealed container.

## PART 3

*Emission limit values for installations of the vehicle coating industry*

1. The total emission limit values are expressed in terms of grams of organic solvent emitted in relation to the surface area of product in square metres and in kilograms of organic solvent emitted in relation to the car body.
2. The surface area of any product dealt with in the table under point 3 is defined as the surface area calculated from the total electrophoretic coating area, and the surface area of any parts that might be added in successive phases of the coating process which are coated with the same coatings as those used for the product in question, or the total surface area of the product coated in the installation.

The surface of the electrophoretic coating area is calculated using the following formula:

$$\frac{2 \times \text{total weight of product shell}}{\text{average thickness of metal sheet} \times \text{density of metal sheet}}$$

This method shall also be applied for other coated parts made out of sheets.

Computer aided design or other equivalent methods shall be used to calculate the surface area of the other parts added, or the total surface area coated in the installation.

3. The total emission limit values in the table below refer to all process stages carried out at the same installation from electrophoretic coating, or any other kind of coating process, through to the final wax and polish of topcoating inclusive, as well as solvent used in cleaning of process equipment, including spray booths and other fixed equipment, both during and outside of production time.

Activity (solvent consumption threshold in tonnes/year)	Production threshold (refers to annual production of coated item)	Total emission limit value	
		New installations	Existing installations
Coating of new cars (> 15)	> 5 000	45 g/m <sup>2</sup> or 1,3 kg/body + 33 g/m <sup>2</sup>	60 g/m <sup>2</sup> or 1,9 kg/body + 41 g/m <sup>2</sup>
	≤ 5 000 monocoque or > 3 500 chassis- built	90 g/m <sup>2</sup> or 1,5 kg/body + 70 g/m <sup>2</sup>	90 g/m <sup>2</sup> or 1,5 kg/body + 70 g/m <sup>2</sup>
		Total emission limit value (g/m <sup>2</sup> )	
Coating of new truck cabins (> 15)	≤ 5 000	65	85
	> 5 000	55	75
Coating of new vans and trucks (> 15)	≤ 2 500	90	120
	> 2 500	70	90
Coating of new buses (> 15)	≤ 2 000	210	290
	> 2 000	150	225

4. Vehicle coating installations below the solvent consumption thresholds mentioned in the table under point 3 shall meet the requirements for the vehicle refinishing sector set out in Part 2.

## PART 4

*Emission limit values relating to volatile organic compounds with specific risk phrases*

1. For emissions of the volatile organic compounds referred to in Article 58 where the mass flow of the sum of the compounds causing the labelling referred to in that Article is greater than, or equal to, 10 g/h, an emission limit value of 2 mg/Nm<sup>3</sup> shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

2. For emissions of halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351, where the mass flow of the sum of the compounds causing the hazard statements H341 or H351 is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm<sup>3</sup> shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

## PART 5

*Reduction scheme*

1. The operator may use any reduction scheme, specially designed for his installation.
2. In the case of applying coatings, varnishes, adhesives or inks, the following scheme can be used. Where the following method is inappropriate, the competent authority may allow an operator to apply any alternative scheme achieving equivalent emission reductions to those achieved if the emission limit values of Parts 2 and 3 were to be applied. The design of the scheme shall take into account the following facts:
  - (a) where substitutes containing little or no solvent are still under development, a time extension shall be given to the operator to implement his emission reduction plans;
  - (b) the reference point for emission reductions should correspond as closely as possible to the emissions which would have resulted had no reduction action been taken.
3. The following scheme shall operate for installations for which a constant solid content of product can be assumed:
  - (a) The annual reference emission is calculated as follows:
    - (i) The total mass of solids in the quantity of coating and/or ink, varnish or adhesive consumed in a year is determined. Solids are all materials in coatings, inks, varnishes and adhesives that become solid once the water or the volatile organic compounds are evaporated.
    - (ii) The annual reference emissions are calculated by multiplying the mass determined in (i) by the appropriate factor listed in the table below. Competent authorities may adjust these factors for individual installations to reflect documented increased efficiency in the use of solids.

Activity	Multiplication factor for use in item (a)(ii)
Rotogravure printing; flexography printing; laminating as part of a printing activity; varnishing as part of a printing activity; wood coating; coating of textiles, fabric film or paper; adhesive coating	4
Coil coating, vehicle refinishing	3
Food contact coating, aerospace coatings	2,33
Other coatings and rotary screen printing	1,5

- (b) The target emission is equal to the annual reference emission multiplied by a percentage equal to:
  - (i) (the fugitive emission limit value + 15), for installations falling within item 6 and the lower threshold band of items 8 and 10 of Part 2,
  - (ii) (the fugitive emission limit value + 5) for all other installations.
- (c) Compliance is achieved if the actual solvent emission determined from the solvent management plan is less than or equal to the target emission.

## PART 6

*Emission monitoring*

1. Channels to which abatement equipment is connected, and which at the final point of discharge emit more than an average of 10 kg/h of total organic carbon, shall be monitored continuously for compliance.
2. In the other cases, Member States shall ensure that either continuous or periodic measurements are carried out. For periodic measurements at least three measurement values shall be obtained during each measurement exercise.
3. Measurements are not required in the case where end-of-pipe abatement equipment is not needed to comply with this Directive.

## PART 7

*Solvent management plan*

## 1. Principles

The solvent management plan shall be used to:

- (a) verify compliance as specified in Article 62;
- (b) identify future reduction options;
- (c) enable provision of information on solvent consumption, solvent emissions and compliance with the requirements of Chapter V to the public.

## 2. Definitions

The following definitions provide a framework for the mass balance exercise.

Inputs of organic solvents (I):

- I1 The quantity of organic solvents or their quantity in mixtures purchased which are used as input into the process in the time frame over which the mass balance is being calculated.
- I2 The quantity of organic solvents or their quantity in mixtures recovered and reused as solvent input into the process. The recycled solvent is counted every time it is used to carry out the activity.

Outputs of organic solvents (O):

- O1 Emissions in waste gases.
- O2 Organic solvents lost in water, taking into account waste water treatment when calculating O5.
- O3 The quantity of organic solvents which remains as contamination or residue in products output from the process.
- O4 Uncaptured emissions of organic solvents into air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.
- O5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including those which are destroyed, by incineration or other waste gas or waste water treatments, or captured, as long as they are not counted under O6, O7 or O8).

- O6 Organic solvents contained in collected waste.
- O7 Organic solvents, or organic solvents contained in mixtures, which are sold or are intended to be sold as a commercially valuable product.
- O8 Organic solvents contained in mixtures recovered for reuse but not as input into the process, as long as not counted under O7.
- O9 Organic solvents released in other ways.

3. Use of the solvent management plan for verification of compliance.

The use made of the solvent management plan shall be determined by the particular requirement which is to be verified, as follows:

- (a) verification of compliance with the reduction scheme as set out in Part 5, with a total emission limit value expressed in solvent emissions per unit product, or otherwise stated in Parts 2 and 3.

- (i) for all activities using the reduction scheme as set out in Part 5, the solvent management plan shall be drawn up annually to determine the consumption (C). The consumption shall be calculated according to the following equation:

$$C = I1 - O8$$

A parallel exercise shall also be undertaken to determine solids used in coating in order to derive the annual reference emission and the target emission each year.

- (ii) for assessing compliance with a total emission limit value expressed in solvent emissions per unit product or otherwise stated in Parts 2 and 3, the solvent management plan shall be drawn up annually to determine the emissions (E). The emissions shall be calculated according to the following equation:

$$E = F + O1$$

Where F is the fugitive emission as defined in point (b)(i). The emission figure shall then be divided by the relevant product parameter.

- (iii) for assessing compliance with the requirements of point (b)(ii) of Article 59(6), the solvent management plan shall be drawn up annually to determine total emissions from all activities concerned, and that figure shall then be compared with the total emissions that would have resulted had the requirements of Parts 2, 3 and 5 been met for each activity separately.

- (b) Determination of fugitive emissions for comparison with the fugitive emission limit values in Part 2:

- (i) The fugitive emission shall be calculated according to one of the following equations;

$$F = I1 - O1 - O5 - O6 - O7 - O8$$

or

$$F = O2 + O3 + O4 + O9$$

F shall be determined either by direct measurement of the quantities or by an equivalent method or calculation, for instance by using the capture efficiency of the process.

The fugitive emission limit value is expressed as a proportion of the input, which shall be calculated according to the following equation:

$$I = I1 + I2$$

- (ii) Determination of fugitive emissions shall be done by a short but comprehensive set of measurements and needs not be done again until the equipment is modified.

## PART 8

*Assessment of compliance with emission limit values in waste gases*

1. In the case of continuous measurements the emission limit values shall be considered to be complied with if:
    - (a) none of the arithmetic averages of all valid readings taken during any 24-hour period of operation of an installation or activity except start-up and shut-down operations and maintenance of equipment exceeds the emission limit values,
    - (b) none of the hourly averages exceeds the emission limit values by more than a factor of 1,5.
  2. In the case of periodic measurements the emission limit values shall be considered to be complied with if, in one monitoring exercise:
    - (a) the average of all the measurement values does not exceed the emission limit values,
    - (b) none of the hourly averages exceeds the emission limit value by more than a factor of 1,5.
  3. Compliance with Part 4 shall be verified on the basis of the sum of the mass concentrations of the individual volatile organic compounds concerned. For all other cases, compliance shall be verified on the basis of the total mass of organic carbon emitted unless otherwise specified in Part 2.
  4. Gas volumes may be added to the waste gas for cooling or dilution purposes where technically justified but shall not be considered when determining the mass concentration of the pollutant in the waste gas.
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## ANNEX VIII

**Technical provisions relating to installations producing titanium dioxide**

## PART 1

*Emission limit values for emissions into water*

1. In case of installations using the sulphate process (as an annual average):  
550 kg of sulphate per tonne of titanium dioxide produced.
2. In case of installations using the chloride process (as an annual average):
  - (a) 130 kg chloride per tonne of titanium dioxide produced using neutral rutile,
  - (b) 228 kg chloride per tonne of titanium dioxide produced using synthetic rutile,
  - (c) 330 kg chloride per tonne of titanium dioxide produced using slag. Installations discharging into salt water (estuarine, coastal, open sea) may be subject to an emission limit value of 450 kg chloride per tonne of titanium dioxide produced using slag.
3. For installations using the chloride process and using more than one type of ore, the emission limit values in point 2 shall apply in proportion to the quantity of the ores used.

## PART 2

*Emission limit values into air*

1. The emission limit values which are expressed as concentrations in mass per cubic meter ( $\text{Nm}^3$ ) shall be calculated at a temperature of 273,15 K, and a pressure of 101,3 kPa.
2. For dust: 50  $\text{mg}/\text{Nm}^3$  as an hourly average from major sources and 150  $\text{mg}/\text{Nm}^3$  as an hourly average from any other source.
3. For gaseous sulphur dioxide and trioxide discharged from digestion and calcination, including acid droplets calculated as  $\text{SO}_2$  equivalent:
  - (a) 6 kg per tonne of titanium dioxide produced as an annual average;
  - (b) 500  $\text{mg}/\text{Nm}^3$  as an hourly average for plants for the concentration of waste acid.
4. For chlorine in the case of installations using the chloride process:
  - (a) 5  $\text{mg}/\text{Nm}^3$  as a daily average;
  - (b) 40  $\text{mg}/\text{Nm}^3$  at any time.

## PART 3

*Emission monitoring*

The monitoring of emissions into air shall include at least the continuous monitoring of:

- (a) gaseous sulphur dioxide and trioxide discharged from digestion and calcination from plants for the concentration of waste acid in installations using the sulphate process;
- (b) chlorine from major sources within installations using the chloride process;
- (c) dust from major sources.

## ANNEX IX

## PART A

*Repealed Directives with their successive amendments*  
(referred to in Article 81)

Council Directive 78/176/EEC (OJ L 54, 25.2.1978, p. 19).	
Council Directive 83/29/EEC (OJ L 32, 3.2.1983, p. 28).	
Council Directive 91/692/EEC (OJ L 377, 31.12.1991, p. 48).	only Annex I, point (b)
Council Directive 82/883/EEC (OJ L 378, 31.12.1982, p. 1).	
Act of Accession of 1985	only Annex I, point X.1(o)
Act of Accession of 1994	only Annex I, point VIII.A.6
Council Regulation (EC) No 807/2003 (OJ L 122, 16.5.2003, p. 36).	only Annex III, point 34
Regulation (EC) No 219/2009 of the European Parliament and of the Council (OJ L 87, 31.3.2009, p. 109).	only Annex, point 3.1
Council Directive 92/112/EEC (OJ L 409, 31.12.1992, p. 11).	
Council Directive 1999/13/EC (OJ L 85, 29.3.1999, p. 1).	
Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).	only Annex I, point 17
Directive 2004/42/EC of the European Parliament and of the Council (OJ L 143, 30.4.2004, p. 87).	only Article 13(1)
Directive 2008/112/EC of the European Parliament and of the Council (OJ L 345, 23.12.2008, p. 68).	only Article 3
Directive 2000/76/EC of the European Parliament and of the Council (OJ L 332, 28.12.2000, p. 91).	
Regulation (EC) No 1137/2008 of the European Parliament and of the Council (OJ L 311, 21.11.2008, p. 1).	only Annex, point 4.8
Directive 2001/80/EC of the European Parliament and of the Council (OJ L 309, 27.11.2001, p. 1).	
Council Directive 2006/105/EC (OJ L 363, 20.12.2006, p. 368).	only Annex, part B, point 2
Directive 2009/31/EC of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 114).	only Article 33
Directive 2008/1/EC of the European Parliament and of the Council (OJ L 24, 29.1.2008, p. 8).	
Directive 2009/31/EC of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 114).	only Article 37



## PART B

*List of time-limits for transposition into national law and application*  
(referred to in Article 81)

Directive	Time-limit for transposition	Time-limit for application
78/176/EEC	25 February 1979	
82/883/EEC	31 December 1984	
92/112/EEC	15 June 1993	
1999/13/EC	1 April 2001	
2000/76/EC	28 December 2000	28 December 2002
		28 December 2005
2001/80/EC	27 November 2002	27 November 2004
2003/35/EC	25 June 2005	
2003/87/EC	31 December 2003	
2008/1/EC	30 October 1999 <sup>(1)</sup>	30 October 1999
		30 October 2007

<sup>(1)</sup> Directive 2008/1/EC is a codified version of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (OJ L 257, 10.10.1996, p. 26) and the time-limits for transposition and application remain in force.

## ANNEX X

Correlation Table

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
Article 1(1)	Article 1	Article 1					Article 66
—	—	—	—	—	—	—	Article 2
Article 1(2), point (a)			Article 2(2)				Article 3(2)
Article 1(2), point (b)					Article 3(1)		Article 3(37)
Article 1(2), points (c), (d) and (e)							—
—	—	—	—	—	—	—	Article 66
Article 2							Article 67
Article 3							Article 11, points (d) and (e)
Article 4			Article 4	Article 3, introductory wording and (1)	Article 4(1)		Article 4(1), first subparagraph
Article 5							Article 11, points (d) and (e)
Article 6							Article 11, points (d) and (e)
Article 7(1)		Article 10					Article 70(1) and 70(2), first sentence
Article 7(2) and (3)							—
—	—	—	—	—	—	—	Article 70(2), second sentence and 70(3)
Article 8(1)							—
Article 8(2)							Article 26(1), second subparagraph
Article 9							—
Article 10							—
Article 11							Article 12
Article 12							—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
Article 13(1)			Article 17(1), first subparagraph and 17(3), first subparagraph, first sentence	Article 11(1), first sentence and 11(2)			Article 72(1), first sentence
—	—	—	—	—	—	—	Article 72(1), second sentence
Article 13(2), (3) and (4)							—
Article 14							—
Article 15	Article 14	Article 12	Article 21	Article 15	Article 21	Article 18(1) and (3)	Article 80
Article 16	Article 15	Article 13	Article 23	Article 17	Article 23	Article 20	Article 84
Annex I							—
Annex II section A introductory wording and point 1							—
Annex II section A point 2							—
Annex II section B							—
	Article 2						—
	Article 3						—
	Article 4(1) and 4(2), first subparagraph						—
	Article 4(2), second subparagraph						—
	Article 4(3) and (4)						—
	Article 5						—
	Article 6						—
	Article 7						—
	Article 8						—
	Article 9						—
	Article 10						—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
	Article 11(1)			Article 13(1)	Article 17(1)		Article 75(1)
—	—	—	—	—	—	—	Article 75(2)
	Article 11(2)				Article 17(2)		—
	Article 11(3)						—
	Article 12						—
	Article 13						—
	Annex I						—
	Annex II						—
	Annex III						—
	Annex IV						—
	Annex V						—
		Article 2(1), introductory wording					—
		Article 2(1)(a), introductory wording					—
		Article 2(1)(a), first indent					Article 67, point (a)
		Article 2(1)(a), second indent					Article 67, point (b)
		Article 2(1)(a), third indent and 2(1)(b), third indent					Article 67, point (d)
		Article 2(1)(a), fourth, fifth, sixth and seventh indent					—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
		Article 2(1)(b), introductory wording and first, fourth, fifth, sixth and seventh indent					—
		Article 2(1)(b), second indent					Article 67, point (c)
		Article 2(1)(c)					—
		Article 2(2)					—
		Article 3					Article 67
		Article 4					Article 67
		Article 5					—
		Article 6, first paragraph, introductory wording					Article 68
		Article 6, first paragraph, point (a)					Annex VIII, Part 1, point 1
		Article 6, first paragraph, point (b)					Annex VIII, Part 1, point 2
		Article 6, second paragraph					Annex VIII, Part 1, point 3
		Article 7					—
		Article 8					—
		Article 9(1) introductory wording					Article 69(2)
		Article 9(1)(a), introductory wording					—
		Article 9(1)(a)(i)					Annex VIII, Part 2, point 2
		Article 9(1)(a)(ii)					Annex VIII, Part 2, point 3, introductory wording, and point 3(a)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
		Article 9(1)(a)(iii)					Article 69(1)
		Article 9(1)(a)(iv)					Annex VIII, Part 2, point 3(b)
		Article 9(1)(a)(v)					—
		Article 9(1)(b)					Annex VIII, Part 2, point 4
		Article 9(2) and (3)					—
		Article 11					Article 11, points (d) and (e)
		Annex					—
			Article 1				Article 1
			Article 2, introductory wording				Article 3, introductory wording
			Article 2(1)	Article 2(14)			Article 3(1)
			Article 2(3)	Article 2(1)			Article 3(3)
			Article 2(4)				—
			Article 2(5)	Article 2(9)	Article 3(8)	Article 2(1)	Article 3(4)
			Article 2(6), first sentence	Article 2(13)	Article 3(9)	Article 2(3), first part	Article 3(5)
			Article 2(6), second sentence				Article 15(1)
			Article 2(7)				Article 3(6)
			Article 2(8)	Article 2(5)			Article 71
			Article 2(9), first sentence	Article 2(7)	Article 3(12)		Article 3(7)
			Article 2(9), second sentence				Article 4(2), first subparagraph
—	—	—	—	—	—	—	Article 4(2), second subparagraph
—	—	—	—	—	—	—	Article 4(3)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 2(10)				—
—	—	—	—	—	—	—	Article 3(8)
			Article 2(11), first sentence				Article 3(9)
			Article 2(11), second sentence				Article 20(3)
			Article 2(12), first subparagraph and Annex IV, introductory wording				Article 3(10)
			Article 2(12), second subparagraph				Articles 14(5), point (a) and 14(6)
			Article 2(13)	Article 2(6)	Article 3(11)	Article 2(5)	Article 3(15)
			Article 2(14)				Article 3(16)
			Article 2(15)				Article 3(17)
—	—	—	—	—	—	—	Article 3(11) to (14), (18) to (23), (26) to (30) and (34) to (36)
			Article 3(1), introductory wording				Article 11, introductory wording
			Article 3(1), point (a)				Article 11, points (a) and (b)
			Article 3(1), point (b)				Article 11, point (c)
			Article 3(1), point (c)				Article 11, points (d) and (e)
			Article 3(1), point (d)				Article 11, point (f)
			Article 3(1), point (e)				Article 11, point (g)
			Article 3(1), point (f)				Article 11, point (h)
			Article 3(2)				—
			Article 5(1)				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 5(2)				Article 80(1), second subparagraph
			Article 6(1), introductory wording				Article 12(1), first subparagraph, introductory wording
			Article 6(1), first subparagraph, points (a) to (d)				Article 12(1), first subparagraph, points (a) to (d)
—	—	—	—	—	—	—	Article 12(1), first subparagraph, point (e)
			Article 6(1), first subparagraph, point (e)				Article 12(1), first subparagraph, point (f)
			Article 6(1), first subparagraph, point (f)				Article 12(1), first subparagraph, point (g)
			Article 6(1), first subparagraph, point (g)				Article 12(1), first subparagraph, point (h)
			Article 6(1), first subparagraph, point (h)				Article 12(1), first subparagraph, point (i)
			Article 6(1), first subparagraph, point (i)				Article 12(1), first subparagraph, point (j)
			Article 6(1), first subparagraph, point (j)				Article 12(1), first subparagraph, point (k)
			Article 6(1), second subparagraph				Article 12(1), second subparagraph
			Article 6(2)				Article 12(2)
			Article 7				Article 5(2)
			Article 8, first paragraph		Article 4(3)		Article 5(1)
			Article 8, second paragraph				—
			Article 9(1), first part of sentence				Article 14(1), first subparagraph



Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 9(1), second part of sentence				—
			Article 9(2)				Article 5(3)
			Article 9(3), first subparagraph, first and second sentence				Article 14(1), second subparagraph, introductory wording and points (a) and (b)
			Article 9(3), first subparagraph, third sentence				Article 14(2)
—	—	—	—	—	—	—	Article 14(3), (4), and (7)
—	—	—	—	—	—	—	Article 14(5), introductory wording and point (b) of first subparagraph and Article 14(5), second subparagraph
			Article 9(3), second subparagraph				—
			Article 9(3), third subparagraph				Article 9(1)
			Article 9(3), fourth subparagraph				Article 9(2)
			Article 9(3), fifth subparagraph				Article 9(3)
			Article 9(3), sixth subparagraph				Article 9(4)
—	—	—	—	—	—	—	Article 10
			Article 9(4), first part of first sentence				Article 15(2)
			Article 9(4), second part of first sentence				Article 15(4), first subparagraph
—	—	—	—	—	—	—	Article 15(4), second to fifth subparagraphs and Article 15(5)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 9(4), second sentence				Article 14(1), second subparagraph, point (g)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (h)
—	—	—	—	—	—	—	Article 15(3)
—	—	—	—	—	—	—	Article 16
			Article 9(5), first subparagraph				Article 14(1), second subparagraph, point (c)(i)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (c)(ii)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (d)
			Article 9(5), second subparagraph				—
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (e)
			Article 9(6), first subparagraph				Article 14(1), second subparagraph, point (f)
			Article 9(6), second subparagraph				—
			Article 9(7)				—
			Article 9(8)				Article 6 and Article 17(1)
—	—	—	—	—	—	—	Article 17(2), (3) and (4)
			Article 10				Article 18
			Article 11				Article 19
			Article 12(1)				Article 20(1)
			Article 12(2), first sentence				Article 20(2), first subparagraph
			Article 12(2), second sentence				Article 20(2), second subparagraph
			Article 12(2), third sentence				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 13(1)				Article 21(1)
—	—	—	—	—	—	—	Article 21(2), (3) and (4)
			Article 13(2), introductory wording				Article 21(5), introductory wording
			Article 13(2)(a)				Article 21(5), point (a)
			Article 13(2)(b)				—
			Article 13(2)(c)				Article 21(5), point (b)
			Article 13(2)(d)				—
—	—	—	—	—	—	—	Article 21(5), point (c)
—	—	—	—	—	—	—	Article 22
—	—	—	—	—	—	—	Article 23(1), first subparagraph
			Article 14, introductory wording and point (a)				Article 8(1)
			Article 14, point (b)				Article 7, point (a) and Article 14(1), point (d)(i)
—	—	—	—	—	—	—	Article 7, introductory wording and points (b) and (c)
—	—	—	—	—	—	—	Article 14(1), point (d)(ii)
			Article 14, point (c)				Article 23(1), second subparagraph
—	—	—	—	—	—	—	Article 23(2) to (6)
			Article 15(1), first subparagraph, introductory wording and points (a) and (b)	Article 12(1), first subparagraph			Article 24(1), first subparagraph, introductory wording and points (a) and (b)
			Article 15(1), first subparagraph, point (c)				Article 24(1), first subparagraph, point (c)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 15(1), second subparagraph				Article 24(1), second subparagraph
			Article 15(2)				Article 24(3)(b)
			Article 15(3)				Article 24(4)
			Article 15(4)				Article 24(2), introductory wording and points (a) and (b)
—	—	—	—	—	—	—	Article 24(2), points (c) to (f) and Article 24(3), introductory wording and point (a)
			Article 16				Article 25
			Article 17(1), second subparagraph				—
			Article 17(2), first subparagraph				Article 13(1)
—	—	—	—	—	—	—	Article 13(2) to (7)
			Article 17(2), second subparagraph				—
			Article 17(3), first subparagraph, second and third sentence	Article 11(1), second sentence			Article 72(2)
			Article 17(3), first subparagraph, fourth sentence				—
—	—	—	—	—	—	—	Article 72(3) and (4)
			Article 17(3), second subparagraph				—
			Article 17(3), third subparagraph	Article 11(3)			Article 73(1)
—	—	—	—	—	—	—	Article 73(2)
			Article 17(4)				—
—	—	—	—	—	—	—	Article 74
—	—	—	—	—	—	—	Article 27
			Article 18			Article 11	Article 26
			Article 19				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 20				—
			Article 21				Article 80(2)
			Article 22		Article 18	Article 17	Article 81
—	—	—	—	—	—	—	Article 82
			Article 23	Article 16	Article 22	Article 19	Article 83
—	—	—	—	—	—	—	Article 2(1)
			Annex I, paragraph 1 of introductory wording				Article 2(2)
			Annex I, paragraph 2 of introductory wording				Annex I, first subparagraph of introductory wording, first sentence
—	—	—	—	—	—	—	Annex I, first subparagraph of introductory wording, second sentence
—	—	—	—	—	—	—	Annex I, second subparagraph of introductory wording
			Annex I, points 1.1 to 1.3				Annex I, points 1.1 to 1.3
			Annex I, point 1.4				Annex I, point 1.4(a)
—	—	—	—	—	—	—	Annex I, point 1.4(b)
			Annex I, point 2				Annex I, point 2
			Annex I, point 3.1				Annex I, point 3.1(a) and (b)
—	—	—	—	—	—	—	Annex I, point 3.1(c)
			Annex I, points 3.2 to 3.5				Annex I, points 3.2 to 3.5
			Annex I, point 4				Annex I, point 4
			Annex I, point 5, introductory wording				—
			Annex I, point 5.1				Annex I, points 5.1(b), (f), (g), (i), (j) and 5.2(b)
—	—	—	—	—	—	—	Annex I, points 5.1(a), (c), (d), (e), (h), (k)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Annex I, point 5.2				Annex I, point 5.2(a)
			Annex I, point 5.3				Annex I, point 5.3(a)(i) and (ii)
—	—	—	—	—	—	—	Annex I, point 5.3(a)(iii) to (v) and 5.3(b)
			Annex I, point 5.4				Annex I, point 5.4
—	—	—	—	—	—	—	Annex I, points 5.5 and 5.6
			Annex I, points 6.1(a) and (b)				Annex I, points 6.1(a) and (b)
—	—	—	—	—	—	—	Annex I, point 6.1(c)
			Annex I, points 6.2 – 6.4(b)				Annex I, points 6.2 – 6.4(b)(ii)
—	—	—	—	—	—	—	Annex I, point 6.4 (b)(iii)
			Annex I, points 6.4(c) – 6.9				Annex I, points 6.4(c) – 6.9
—	—	—	—	—	—	—	Annex I, points 6.10 and 6.11
			Annex II				—
			Annex III				Annex II, 'Air', and 'Water', points 1 to 12
—	—	—	—	—	—	—	Annex II, 'Water', point 13
			Annex IV				Annex III
			Annex V				Annex IV
				Article 1			Article 56
				Article 2(2)			Article 57(1)

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				Article 2(3)			—
				Article 2(4)			Article 63(1)
				Article 2(8)			Article 4(1), third subparagraph
				Article 2(10)			Article 57(3)
				Article 2(11)			Article 57(2)
				Article 2(12)			Article 57(4)
				Article 2(15)			Article 57(5)
				Article 2(16)			Article 3(44)
				Article 2(17)			Article 3(45)
				Article 2(18)			Article 3(46)
				Article 2(19)			—
				Article 2(20)			Article 3(47)
				Article 2(21)			Article 57(6)
				Article 2(22)			Article 57(7)
				Article 2(23)			Article 57(8)
				Article 2(24)			Article 57(9)
				Article 2(25)			Article 57(10)
				Article 2(26)			Article 57(11)
				Article 2(27)			—
				Article 2(28)			Article 63(1)
				Article 2(29)			—
				Article 2(30)			Article 57(12)
				Article 2(31)			Annex VII, Part 2, first sentence Annex VIII, Part 2, point 1
				Article 2(32)			—
				Article 2(33)			Article 57(13)
				Article 3(2)			Article 4(1), second subparagraph

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				Article 4(1), (2) and(3)			Article 4(1), first and second subparagraph
				Article 4(4)			Article 63(2)
				Article 5(1)			Article 59(1), first subparagraph, introductory wording
				Article 5(2)			Article 59(1) first subparagraph, points (a) and (b)
				Article 5(3), first subparagraph, point (a)			Article 59(2)
				Article 5(3), first subparagraph, point (b)			Article 59(3)
				Article 5(3), second subparagraph			Article 59(4)
—	—	—	—	—	—	—	Article 59(5)
				Article 5(4)			—
				Article 5(5)			Article 59(6)
				Article 5(6)			Article 58
				Article 5(7)			Annex VII, Part 4, point 1
				Article 5(8) first subparagraph			Annex VII, Part 4, point 2
				Article 5(8) second subparagraph			—
				Article 5(9)			—
				Article 5(10)			Article 59(7)
				Article 5(11), (12) and (13)			—
				Article 6			—
				Article 7(1), introductory wording and first, second, third and fourth indent			Article 64



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				Article 7(1), closing wording			—
				Article 7(2)			—
				Article 8(1)			Article 14(1), point (d), Article 60
—	—	—	—	—	—	—	Article 61
				Article 8(2)			Annex VII, Part 6, point 1
				Article 8(3)			Annex VII, Part 6, point 2
				Article 8(4)			Annex VII Part 6, point 3
				Article 8(5)			—
				Article 9(1), first subparagraph, introductory wording			Article 62, first subparagraph, introductory wording
				Article 9(1), first subparagraph, first, second and third indent			Article 62, first subparagraph, points (a), (b) and (c)
				Article 9(1), second subparagraph			Article 62, second subparagraph
				Article 9(1), third subparagraph			Annex VII, Part 8, point 4
				Article 9(2)			Article 63(3)
				Article 9(3)			Annex VII, Part 8, point 1
				Article 9(4)			Annex VII, Part 8, point 2
				Article 9(5)			Annex VII, Part 8, point 3
				Article 10	Article 4(9)		Article 8(2)
				Article 11(1), third to sixth sentences			—
				Article 12(1), second subparagraph			Article 65(1), first subparagraph
				Article 12(1), third subparagraph			Article 65(1), second subparagraph
				Article 12(2)			Article 65(2)

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				Article 12(3)			Article 65(3)
				Article 13(2) and (3)			—
				Article 14	Article 19	Article 16	Article 79
				Annex I, first and second sentence of introductory wording			Article 56
				Annex I, third sentence of introductory wording and list of activities			Annex VII, Part 1
				Annex IIA			Annex VII, Parts 2 and 3
				Annex IIA, Part II, last sentence of paragraph 6			—
				Annex IIB, point 1, first and second sentences			Article 59(1), first subparagraph, point (b)
				Annex IIB, point 1, third sentence			Article 59(1), second subparagraph
				Annex IIB, point 2			Annex VII, Part 5
				Annex IIB, point 2, second subparagraph (i) and table			—
				Annex III, point 1			—
				Annex III, point 2			Annex VII, Part 7, point 1
				Annex III, point 3			Annex VII, Part 7, point 2
				Annex III, point 4			Annex VII, Part 7, point 3
					Article 1, first paragraph		Article 42
					Article 1, second paragraph		—
					Article 2(1)		Article 42(1), first subparagraph

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—	—	—	—	—	—	—	Article 42(1), second to fifth subparagraphs
					Article 2(2), introductory wording		Article 42(2), introductory wording
					Article 2(2)(a), introductory wording		Article 42(2)(a), introductory wording
					Article 2(2)(a), points (i) to (v)		Article 42(2)(a), point (i)
					Article 2(2)(a), point (vi)		Article 42(2)(a), point (ii)
					Article 2(2)(a), point (vii)		Article 42(2)(a), point (iii)
					Article 2(2)(a), point (viii)		Article 42(2)(a), point (iv)
					Article 2(2)(b)		Article 42(2)(b)
					Article 3(2), first subparagraph		Article 3(38)
					Article 3(2), second subparagraph		—
					Article 3(3)		Article 3(39)
					Article 3(4), first subparagraph		Article 3(40)
					Article 3(4), second subparagraph		Article 42(1), third subparagraph
—	—	—	—	—	—	—	Article 42(1), fourth subparagraph
					Article 3(5), first subparagraph		Article 3(41)
					Article 3(5), second subparagraph		Article 42(1), fifth subparagraph
					Article 3(5), third subparagraph		Article 42(1), third subparagraph

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					Article 3(6)		Annex VI, Part 1, point (a)
					Article 3(7)		Article 3(42)
—	—	—	—	—	—	—	Annex VI, Part 1, point (b)
					Article 3(10)		Article 3(43)
					Article 3(13)		Article 43
					Article 4(2)		Article 44
					Article 4(4), introductory wording and points (a) and (b)		Article 45(1), introductory wording and points (a) and (b)
					Article 4(4), point (c)		Article 45(1), point (e)
					Article 4(5)		Article 45(2)
					Article 4(6)		Article 45(3)
					Article 4(7)		Article 45(4)
					Article 4(8)		Article 54
					Article 5		Article 52
					Article 6(1), first subparagraph		Article 50(1)
					Article 6(1), second subparagraph and 6(2)		Article 50(2)
					Article 6(1), third subparagraph		Article 50(3), first subparagraph
					Article 6(1), first part of fourth subparagraph		—
					Article 6(1), second part of fourth subparagraph		Article 50(3), second subparagraph
					Article 6(3)		Article 50(4)
					Article 6(4), first and second sentences of first subparagraph and Article 6(4), first and second sentences of second subparagraph		Article 51(1)

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					Article 6(4), third sentence of first subparagraph		Article 51(2)
—	—	—	—	—	Article 6(4), third sentence of second subparagraph	—	Article 51(3), first subparagraph
					Article 6(4), third subparagraph		Article 51(3), second subparagraph
					Article 6(4), fourth subparagraph		Article 51(4)
					Article 6(5), first part of sentence		—
					Article 6(5), second part of the sentence		Article 46(1)
					Article 6(6)		Article 50(5)
					Article 6(7)		Article 50(6)
					Article 6(8)		Article 50(7)
					Article 7(1) and Article 7(2), first subparagraph		Article 46(2), first subparagraph
					Article 7(2), second subparagraph		Article 46(2), second subparagraph
					Article 7(3) and Article 11(8), first subparagraph, introductory wording		Annex VI, Part 6, first part of point 2.7
					Article 7(4)		Article 46(2), second subparagraph
					Article 7(5)		—
					Article 8(1)		Article 45(1), point (c)
					Article 8(2)		Article 46(3)
					Article 8(3)		—
					Article 8(4), first subparagraph		Article 46(4), first subparagraph

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					Article 8(4), second subparagraph		Annex VI, Part 6, point 3.2
					Article 8(4), third subparagraph		—
					Article 8(4), fourth subparagraph		—
					Article 8(5)		Article 46(4), second and third subparagraph
					Article 8(6)		Article 45(1), points (c) and (d)
					Article 8(7)		Article 46(5)
					Article 8(8)		—
					Article 9, first subparagraph		Article 53(1)
					Article 9, second subparagraph		Article 53(2)
					Article 9, third subparagraph		Article 53(3)
					Article 10(1) and (2)		—
					Article 10(3), first sentence		Article 48(2)
					Article 10(3), second sentence		—
					Article 10(4)		Article 48(3)
					Article 10(5)		Annex VI, Part 6, second part of point 1.3
					Article 11(1)		Article 48(1)
					Article 11(2)		Annex VI, Part 6, point 2.1
					Article 11(3)		Annex VI, Part 6, point 2.2
					Article 11(4)		Annex VI, Part 6, point 2.3
					Article 11(5)		Annex VI, Part 6, point 2.4

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					Article 11(6)		Annex VI, Part 6, point 2.5, first subparagraph
—	—	—	—	—	—	—	Annex VI, Part 6, point 2.5, second subparagraph
					Article 11(7), first part of first sentence of first subparagraph		Annex VI, Part 6, point 2.6, introductory wording
					Article 11(7), second part of first sentence of first subparagraph		Annex VI, Part 6, point 2.6(a)
					Article 11(7), second sentence of first subparagraph		—
					Article 11(7), second subparagraph		—
					Article 11(7), point (a)		Annex VI, Part 6, point 2.6(b)
					Article 11(7), points (b) and (c)		—
					Article 11(7), point (d)		Annex VI, Part 6, point 2.6(c)
					Article 11(7), points (e) and (f)		—
					Article 11(8), first subparagraph, points (a) and (b)		Annex VI, Part 3, point 1
					Article 11(8), first subparagraph, point (c) and second subparagraph		Annex VI, Part 6, second subparagraph of point 2.7
					Article 11(8), first subparagraph, point (d)		Annex VI, Part 4, point 2.1, second subparagraph
					Article 11(9)		Article 48(4)
					Article 11(10)		Annex VI, Part 8, point 1.1
					Article 11(11)		Annex VI, Part 8, point 1.2
					Article 11(12)		Annex VI, Part 8, point 1.3

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					Article 11(13)		Article 48(5)
—	—	—	—	—	—	—	Article 49
					Article 11(14)		Annex VI, Part 6, point 3.1
					Article 11(15)		Article 45(1), point (e)
					Article 11(16)		Annex VI, Part 8, point 2
					Article 11(17)		Article 8(2), point (a)
					Article 12(1)		Article 55(1)
					Article 12(2), first and second sentence		Article 55(2)
					Article 12(2), third sentence		Article 55(3)
					Article 13(1)		Article 45(1), point (f)
					Article 13(2)		Article 47
					Article 13(3)		Article 46(6)
					Article 13(4)		Annex VI, Part 3, point 2
					Article 14		—
					Article 15		—
					Article 16		—
					Article 20		—
					Annex I		Annex VI, Part 2
					Annex II, first part (without numbering)		Annex VI, Part 4, point 1
					Annex II, point 1, introductory wording		Annex VI, Part 4, point 2.1
					Annex II, points 1.1 and 1.2		Annex VI, Part 4, points 2.2 and 2.3
—	—	—	—	—	—	—	Annex VI, Part 4, point 2.4
					Annex II, point 1.3		—
					Annex II, point 2.1		Annex VI, Part 4, point 3.1



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—	—	—	—	—	—	—	Annex VI, Part 4, point 3.2
					Annex II, point 2.2		Annex VI, Part 4, point 3.3 and 3.4
					Annex II, point 3		Annex VI, Part 4, point 4
					Annex III		Annex VI, Part 6, point 1
					Annex IV, table		Annex VI, Part 5
					Annex IV, final sentence		—
					Annex V, point (a), table		Annex VI, Part 3, point 1.1
					Annex V, point (a), final sentences		—
					Annex V, point (b), table		Annex VI, Part 3, point 1.2
					Annex V, point (b), final sentence		—
					Annex V, point (c)		Annex VI, Part 3, point 1.3
					Annex V, point (d)		Annex VI, Part 3, point 1.4
					Annex V, point (e)		Annex VI, Part 3, point 1.5
					Annex V, point (f)		Annex VI, Part 3, point 3
					Annex VI		Annex VI, Part 7
						Article 1	Article 28, first subparagraph
						Article 2(2)	Annex V, Part 1, point 1 and Part 2, point 1, first subparagraph
—	—	—	—	—	—	—	Annex V, Part 1, point 1 and Part 2, point 1, second subparagraph
						Article 2(3) second part	Annex V, Part 1, point 1 and Part 2, point 1, first subparagraph

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—	—	—	—	—	—	—	Annex V, Part 1, point 1 and Part 2, point 1, second subparagraph
						Article 2(4)	—
						Article 2(6), first part	Article 3(24)
						Article 2(6), second part	Article 28, second subparagraph, point (j)
						Article 2(7), first subparagraph	Article 3(25)
						Article 2(7), second subparagraph, first sentence	—
						Article 2(7), second subparagraph, second sentence and points (a) to (i)	Article 28, second subparagraph and points (a) to (i)
						Article 2(7), second subparagraph, point (j)	—
						Article 2(7), third subparagraph	—
—	—	—	—	—	—	—	Article 29(1)
						Article 2(7), fourth subparagraph	Article 29(2)
—	—	—	—	—	—	—	Article 29(3)
						Article 2(8)	Article 3(32)
						Article 2(9)	—
						Article 2(10)	—
						Article 2(11)	Article 3(31)
						Article 2(12)	Article 3(33)
						Article 2(13)	—
						Article 3	—
						Article 4(1)	—
						Article 4(2)	—

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						Article 4(3)to 4(8)	
						Article 5(1)	Annex V, Part 1, point 2, second subparagraph
							Annex V, Part 1, point 2, first, third and fourth subparagraphs
						Article 5(2)	—
						Article 6	—
						Article 7(1)	Article 37
						Article 7(2)	Article 30(5)
						Article 7(3)	Article 30(6)
						Article 8(1)	Article 40(1)
						Article 8(2), first part of first subparagraph	Article 40(2), first part of first subparagraph
						Article 8(2), second part of first subparagraph	—
—	—	—	—	—	—	—	Article 40(2), second part of first subparagraph
—	—	—	—	—	—	—	Article 40(2), second subparagraph
—	—	—	—	—	—	—	Article 40(3)
—	—	—	—	—	—	—	Article 41
						Article 8(2), second subparagraph	—
						Article 8(3) and (4)	—
						Article 9	Article 30(1)
—	—	—	—	—	—	—	Article 30(2), (3) and (4)
						Article 9a	Article 36
						Article 10, first paragraph, first sentence	Article 30(7), first sentence

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—	—	—	—	—	—	—	Article 30(7), second sentence
—	—	—	—	—	—	—	Article 30(8) and (9)
—	—	—	—	—	—	—	Article 31 to 35
						Article 10, first paragraph, second sentence	—
						Article 10, second paragraph	—
						Article 12, first sentence	Article 38(1)
						Article 12, second sentence	—
—	—	—	—	—	—	—	Article 38(2), (3) and (4)
—	—	—	—	—	—	—	Article 39
						Article 13	Annex V, Part 3, third part of point 8
						Article 14	Annex V, Part 4
—	—	—	—	—	—	—	Annex V, Part 5, 6 and 7
						Article 15	—
						Article 18(2)	—
						Annex I	—
						Annex II	—
						Annex III and IV	Annex V, point 2 of Part 1 and Part 2
						Annex V A	Annex V, Part 1, point 3
						Annex V B	Annex V, Part 2, point 3
						Annex VI A	Annex V, Part 1, points 4 and 6
—	—	—	—	—	—	—	Annex V, Part 1, point 5
						Annex VI B	Annex V, Part 2, points 4 and 6
—	—	—	—	—	—	—	Annex V, Part 2, point 5

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						Annex VII A	Annex V, Part 1, points 7 and 8
						Annex VII B	Annex V, Part 2, points 7 and 8
						Annex VIII A point 1	—
						Annex VIII A point 2	Annex V, Part 3, first part of point 1 and points 2, 3 and 5
—	—	—	—	—	—	—	Annex V, Part 3, second part of point 1
—	—	—	—	—	—	—	Annex V, Part 3, point 4
						Annex VIII A point 3	—
						Annex VIII A point 4	Annex V, Part 3, point 6
						Annex VIII A point 5	Annex V, Part 3, points 7 and 8
						Annex VIII A point 6	Annex V, Part 3, points 9 and 10
—	—	—	—	—	—	—	Annex V, Part 3, point 11
—	—	—	—	—	—	—	Annex V, Part 4
						Annex VIII B	—
						Annex VIII C	—
			Annex VI			Annex IX	Annex IX
			Annex VII			Annex X	Annex X

## Permitting Decisions- Variation

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We have decided to grant the variation for Rabone Lane operated by Sims Group UK Limited.

The permit number is EPR/ZP3691ET.

This variation adds installation activities to the permit for the treatment and storage of hazardous waste. This is due to a change in EWC code classification of small Mixed WEEE (Waste Electrical and Electronic Equipment) plastic casings. These can contain POPs (Persistent Organic Pollutants) and as result are deemed to be hazardous waste. This variation adds the following activities to the permit:

Section 5.3 A (1) a) (ii) - disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment and

Section 5.6 A (1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

It also adds the following waste codes to the permit: EWC 19 10 03\*, 19 10 05\*, 19 12 11\* 19 02 04\*, and 16 02 15\*.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

### Purpose of this document

This decision document provides a record of the decision-making process. It

- highlights [key issues](#) in the determination.
- summarises the decision making process in the [decision considerations](#) section to show how the main relevant factors have been taken into account
- shows how we have considered the [consultation responses](#)

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

## Key issues of the decision

### An overview of the application proposals/permit

The variation application is to allow Sims Group UK limited to add the following activities to their permit at the Rabone Lane site:

- Section 5.3 A (1) a) (ii) - disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment and
- Section 5.6 A (1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

It also adds the following waste codes to the permit: EWC 19 10 03\*, 19 10 05\*, 19 12 11\* 19 02 04\*, and 16 02 15\*.

There is no increase in permitted annual tonnage of waste that the site is allowed to accept. The above activities have been inserted for storage and treatment of hazardous waste due to the reclassification of plastic casings derived from WEEE waste.

WEEE wastes will be stored and dealt with in accordance with relevant legislative requirements of The Waste Electrical and Electronic Equipment Regulations 2013 and in accordance with Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities.

A dedicated storage bay/area with an impermeable surface and sealed drainage has been designated for the above waste codes. All waste assigned with these hazardous waste codes, once accepted on to the site, will be stored within the designated storage bay/area prior to processing. A maximum of 500 tonnes of hazardous waste can be stored at any one time. However, this storage volume is routinely expected to be well below the maximum. Batteries will be stored in leak-proof containers with lids to prevent the ingress of water.

WEEE wastes will be manually pre-treated on site to remove components that require removal prior to mechanical treatment, and this will take place undercover.

The treatment operations are handled in batches to allow for separate treatment of hazardous and non-hazardous wastes. Each batch is treated within the shredder to reduce the size of the delivered waste. After shredding, the metals are recovered by a combination of air extraction, size sorting, magnetic separation, eddy-current separation, and hand sorting before the remaining waste streams are sent to Sims site at Long Marston for further recovery.

Under Article 7 of the Regulation (EU) 2019/1021 of the European Parliament and of the Council on persistent organic pollutants (the POPs regulation) requires that any POPs in waste plastic is destroyed or irreversibly transformed. Destruction of POPs in the waste plastic fraction is achieved by off-site third-party facilities that accept this residue. Destruction of POPs will be achieved by incineration, consumed/ destroyed in the metal smelting process.

### **Waste Treatment BAT Conclusions on Dust Management**

Sims Group UK Limited submitted a programme of works in order to meet Waste Treatment BAT Conclusion requirements on dust. This programme indicated that the conveyor belts which transport lighter fractions would be enclosed, by the end October 2023. However, the operator has said there is a slight delay in getting the covers fabricated and that these will be implemented by the end of January 2024. An additional programme to install enclosures on the trommel / ECS and drum magnet will also take place by end January 2024. Both programmes have been included in the permit as an improvement condition.

The shredder plant has a cyclone system consisting of dust suppression and a series of wet scrubbers. Heavy fraction falls to the bottom of cyclone 1, lighter fraction to cyclone 2, which, following treatment through the dust suppression system and wet 'scrubbers' drops to a bay. The bay has dust suppression via fixed sprays. Maintenance is carried out on the wet scrubber and cyclone systems daily to ensure effective operation.

There are two extraction points for channelled emissions to air that are linked to the shredder. In line with the Waste Treatment BAT Conclusions, we have applied the appropriate BAT limits to the extraction points as follows:

- Emission point A1 – we have set a BAT AEL limit of 5 mg/m<sup>3</sup> because it is not directly located over the shredder. Given, its location in relation to the shredder, we have considered that a bag filter can easily be used for emission control without risk of deflagration.
- Emission point A2 – we have set BAT AEL limit of 10mg/m<sup>3</sup> against this emission point because it is located directly over the shredder mill. As such it is impracticable to use bag without the risk of deflagration.

In addition:

- There are 3 bays for shredder residue/ waste storage. These bays have an impermeable surface with sealed drainage system and are enclosed on 3 sides to prevent or where that is not practicable, minimise the potential for windblown emissions.
- Manual sweeping will be employed on plant and equipment to minimise build-up of dust and debris.



- Dust suppression techniques such as dampening, and the use of both manual and mechanical sweeping will be employed as necessary to prevent unacceptable emissions. A hose or IBC/bowsers of water will be available to suppress dust on site surfacing and roadways. The mechanical sweeper attachment will be used at least daily and recorded in the Site Diary.
- Good housekeeping will be employed daily to reduce quantities of particulates and dust accumulating on the site. This will occur throughout the operation as required and may also be undertaken as part of the routine maintenance activity.

### **Emissions to Surface Water**

Surface waters drain via the site drainage system (indirect discharge) linked to an interceptor which discharges to the foul water sewer in Foundry Lane. Records of drainage maintenance will be held on site and made available to the Environment Agency on request.

The site is permitted to discharge process water and runoff from the treatment and storage to foul sewer. Sims Group (UK) Limited have a Trade Effluent Consent from Severn Trent Water for that discharge (Consent No. 008675V).

Representative monitoring of the surface water discharged from point S2 have been undertaken together with a report of the H1 Screening tool. Sewage treatment reduction factors were applied, and all parameters measured against Maximum Allowable Concentration (MAC) passed test 2. However, Zinc was close to the upper limit of the waste BAT AEL for indirect discharges (BAT 20). The waste BAT AELs and monitoring requirements for indirect discharges to a receiving water body have been added to the permit under table 3.2. We have concluded that because the shredder on site will be processing both metal waste and hazardous waste, we cannot include the higher BAT AEL limits in the permit for lead and zinc because the higher limits are applicable to mechanical treatment in shredders of metal waste. The limits of lead and zinc are set as 0.1mg/l and 1 mg/l respectively.

## **Decision considerations**

### **Confidential information**

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

## Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

## Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

UK Health Security Agency – see response below.

Local Authority - Environmental Health – no response.

The comments and our responses are summarised in the [consultation responses](#) section.

## Operator

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.

## The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

## Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

## General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

The operating techniques are in line with the following, Control and monitor emissions for your environmental permit, Waste electrical and electronic equipment (WEEE) appropriate Measures for Permitted Facilities, and Waste Treatment BAT Conclusions.

## Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

## Waste types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

We made these decisions with respect to waste types in accordance with:

- Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste
- Waste electrical and electronic equipment (WEEE) appropriate Measures for Permitted Facilities
- Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRRT), treatment of Waste Electrical and Electronic Equipment (WEEE)

## Improvement programme

IC1 The operator shall submit a written report to the Environment Agency for assessment and written approval.

The report must contain:

- details of the programme to review and install covers on the trommel, drum magnet and conveyors that transport lighter fractions.
- a review of the effectiveness of the above programme once completed, by monitoring particulate/dust as specified in the permit.
- proposals for further measures to be undertaken to reduce particulate emissions at the facility (if necessary) and dates for implementation.

The operator must implement the proposals in the report in line with the timescales agreed with the Environment Agency.

## Emission limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances:

For point source emissions to sewer, we have set limits for the following:

- Hydrocarbon oil index (HOI)
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Nickel
- Mercury
- Zinc

Emissions limits have been added as a result of this variation. It is considered that the numeric limits described below will prevent significant deterioration of receiving waters.

## Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified in the permit (table 3.1 Point Source Emissions to Air):

- Dust
- Total Volatile Organic Compounds (VOC)
- Brominated fire retardants
- Dioxin-like polychlorinated biphenyls (PCBs)
- Metals (Arsenic, Cadmium, Copper, Colbolt, Maganese , Nickel, Lead, Antimony, Selenium, Titanium, Vanadium)
- Dioxins and furans (PCDD/F)

Table 3.2 in the permit outlines Point Source Emissions to sewer these are:

- Hydrocarbon oil index (HOI)
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Nickel
- Mercury
- Zinc

These monitoring requirements have been included in order to ensure that there are no significant emissions to air and surface water for the parameters listed.

We made these decisions in accordance with Waste Treatment BAT Conclusions, Waste electrical and electronic equipment (WEEE) appropriate Measures for Permitted Facilities, Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRRT), treatment of Waste Electrical and Electronic Equipment (WEEE).

## Reporting

We have specified reporting in the permit.

We made these decisions in accordance with Waste Treatment BAT Conclusions, Waste electrical and electronic equipment (WEEE) appropriate Measures for Permitted Facilities, Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRRT), treatment of Waste Electrical and Electronic Equipment (WEEE).

## Management system

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

## **Technical competence**

Technical competence is required for activities permitted.

The operator is a member of the CIWM/WAMITAB scheme.

We are satisfied that the operator is technically competent.

## **Previous performance**

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.

## **Financial competence**

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

## **Growth duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

## **Consultation Responses**

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, and the way in which we have considered these in the determination process.

### **Responses from organisations listed in the consultation section**

#### **Response received from UKHSA.**

##### **Brief summary of issues raised:**

The main emission of potential concern is dust from shredding of metal waste, including waste electrical and electronic equipment (WEEE) and end of life vehicles (ELVs) and their components.

UKHSA is however satisfied that the control measures proposed by the applicant should ensure that there are no significant impacts on public health.

UKHSA has no significant concerns regarding the risk to the health of the local population from the installation. This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.

##### **Summary of actions taken:**

In line with UKHSA comments, the permit has been issued in line with the relevant guidance Waste Treatment BAT Conclusions, Waste electrical and electronic equipment (WEEE) appropriate Measures for Permitted Facilities, Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRRT), treatment of Waste Electrical and Electronic Equipment (WEEE).

## Finan, Frank

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**From:** Victoria Jones <victoria.jones@simsmm.com>  
**Sent:** 27 June 2023 12:53  
**To:** Harris, Craig  
**Cc:** Clare Haste; Jennifer Stringer  
**Subject:** RE: SIMS Schedule 5 Request Application ZP3691ET /V005 - Attachment 1 of 3: Schedule 5 Notice  
**Attachments:** LIT 11958 - Notice of request for more information under schedule 5 of EPR.pdf

**Victoria Jones**  
EHS Director - Europe, Sims Limited

Mobile: +44 07775563202  
[www.simsltd.com](http://www.simsltd.com)



---

**From:** Victoria Jones  
**Sent:** 27 June 2023 12:49  
**To:** 'Harris, Craig' <Craig.Harris@environment-agency.gov.uk>  
**Cc:** Clare Haste <clare.haste@simsmm.com>; 'Jennifer Stringer' <StringerJ@rpsgroup.com>  
**Subject:** RE: SIMS Schedule 5 Request Application ZP3691ET /V005

Dear Craig

I have just got an undeliverable message back – I am thinking it may be in respect of some or all of the attachments I am trying to send over.

So please see the email below and I shall try and send over each attachment separately – there will be 3 attachments in total – so 3 emails.

Fingers crossed!

**Victoria Jones**  
EHS Director - Europe, Sims Limited

Mobile: +44 07775563202  
[www.simsltd.com](http://www.simsltd.com)



---

**From:** Victoria Jones  
**Sent:** 27 June 2023 12:43  
**To:** Harris, Craig <[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)>  
**Cc:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>; Jennifer Stringer <[StringerJ@rpsgroup.com](mailto:StringerJ@rpsgroup.com)>  
**Subject:** FW: SIMS Schedule 5 Request Application ZP3691ET /V005  
**Importance:** High



Hello Craig,

In response to the schedule 5 ZP3691ET/V005 attached and related correspondence, please see below and attached, for responses to the questions.

1 a) There are technical reasons why it is not practical to install a fabric filter to the shredder at Smethwick. The existing control techniques are damp techniques. The waste to be shredded is damped by injecting water into the shredder. The amount of water injected is regulated in relation to the amount of waste being shredded. The air that contains residual dust is directed to a cyclone and then a wet scrubber. A bag filter cannot be used in conjunction with these damp techniques as the bag filter would become clogged by damp particulates and would be ineffective. A bag filter is therefore not an applicable technique in this circumstance. BAT is met by the following combination 3 of the 4 techniques described in BAT 25:Cyclone, wet scrubbing and water injection into the shredder.

1 b) An emissions limit of 10mg/Nm3 is applicable as it is not applicable to fit a fabric filter as detailed in response to point 1a). Please see below results from stack emissions monitoring in 2022. As previously noted, some results were above the BAT AEL's, but repairs to the system were made and ongoing to ensure results can meet BAT AEL's going forward.

**Appendix 1 Emission Points A1 & A2 Results**

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result	Test method	Sample Date and Times	Uncertainty
A2	Total Suspended particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	22.76 mg/m <sup>3</sup>	As agreed with the Environment Agency	Q1 17.01.22 10:17 – 13:36	+/- 1.74 mg/m <sup>3</sup>
A2	Total Suspended particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	No result	As agreed with the Environment Agency	Q2	No result
A2	Total Suspended particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	4.92 mg/m <sup>3</sup>	As agreed with the Environment Agency	Q3 01.09.22 09:54 – 13:17	+/- 0.59 mg/m <sup>3</sup>
A2	Total Suspended particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	3.62 mg/m <sup>3</sup>	As agreed with the Environment Agency	Q4 05.12.22 10:05 – 13:37	+/- 0.38 mg/m <sup>3</sup>

1 c) Outdoor shredding of WEEE is considered BAT for this site for the following reasons: It is not operationally practicable to fully enclose the shredder on grounds of its size and the volume of wastes treated. There are other abatement techniques to minimise emissions which meet BAT.

- Suppression in the Shredder - The waste to be shredded is damped by injecting water into the shredder. The shredder has water injection in form of spray suppression on top of the mill. The amount of water injected is regulated in relation to the amount of waste being shredded. Rate of internal water suppression can be tailored by waste type / conditions. The air that contains residual dust is directed to the cyclone system and then a wet scrubber. The wet scrubber system is a damping system that dampens down any small dust particles, by adding water it drops the dust in to the wet scrubber and reduces the dust emissions from the shredder stack. The waste output from the system is directed to a waste storage bay which benefits from dust suppression via fixed sprays. These techniques meet BAT 25 which requires use of one or a combination of techniques described to be used. Smethwick shredder implements 3 of the 4 techniques specified. A fabric filter is not applicable as detailed above.

In addition, relevant parts of the mechanical treatment process are covered to further minimise emissions.

- Conveyors which transport lighter fractions will be covered. The first part of No. 1 Transfer Conveyor has been covered for dust control by covering/enclosure to minimise emissions. The drum magnet is fed by a covered chute. A review has been completed and a programme for installing additional covers is scheduled.
- Infeed conveyors will not be enclosed due to safety, needing to be able to see the material and also because they are not a significant source of emissions. Radial stacker conveyor will not be covered as the waste is metallic at this point and it is not a significant source of emissions.
- Drop heights are minimised where practicable by use of curtains / chutes e.g. Rubber flaps are fitted to the inlet and outlet of the shredder mill. Curtains are fitted to the drop points into containers from the picking shed.
- Misting or damping systems, i.e. water injection, wet scrubber, fixed spray dust suppression misting systems are present in waste output bays and also the transfer conveyor. A dousing system can be operated in an emergency which floods the shredder exit belt with water.
- Enclosures - the feed to No.1 Transfer conveyor is covered by a hopper. The trommel / ECS is in a partial enclosure. A programme for reviewing install of additional enclosures on the trommel / ECS and drum magnet will take place.
- Netting- Micro-mesh netting is located along the back of the waste output bays under the trommel and ECS to further reduce the potential for dust emissions.
- A portable water hose is available to suppress dust in areas not covered by fixed spray systems.

2 a) Please find attached H1 assessment previously undertaken (email attached called Sims Group UK Limited EPR/ZP3691ET Improvement Condition IC7). As per supporting letter, the application is to regularise treatment of waste that was previously permitted, prior to reclassification as hazardous. The inventory considered these wastes. The H1 assessment contains the Trade Effluent Consent for the site against which the site is measured by the Waste Water Treatment Works. It also contains the sampling protocol agreed with the local EA officer.

3 a) Thank you for your email dated 21.06.23 confirming our understanding that covering whole SMW WEEE is not required.

Site Plan a) Please see attached. The monitoring points are labelled.

Kind regards

**Victoria Jones**  
EHS Director - Europe, Sims Limited

Mobile: +44 07775563202  
[www.simsltd.com](http://www.simsltd.com)




---

**From:** Harris, Craig <[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)>  
**Sent:** 16 June 2023 07:47  
**To:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>; Jennifer Stringer <[StringerJ@rpsgroup.com](mailto:StringerJ@rpsgroup.com)>  
**Cc:** Nwafor, Francis <[francis.nwafor@environment-agency.gov.uk](mailto:francis.nwafor@environment-agency.gov.uk)>  
**Subject:** RE: SIMS Schedule 5 Request Application ZP3691ET /V005

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Morning Clare

It seems sensible to grant the extension to 26<sup>th</sup> June given the discussion with Alan and Andy may have an impact on the response.

*Kind regards,*

**Craig Harris BSc (Hons), BA (Hons), PER  
Permitting Officer  
Environment Agency - East Midlands**

07770 323461

[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)

Environment Agency Trentside Offices, Scarrington Road, West Bridgford, Nottingham, NG2 5FA  
NG2 5BR (Sat Nav Friendly)



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**From:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>  
**Sent:** 15 June 2023 15:29  
**To:** Harris, Craig <[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)>; Jennifer Stringer <[StringerJ@rpsgroup.com](mailto:StringerJ@rpsgroup.com)>  
**Cc:** Nwafor, Francis <[francis.nwafor@environment-agency.gov.uk](mailto:francis.nwafor@environment-agency.gov.uk)>  
**Subject:** RE: SIMS Schedule 5 Request Application ZP3691ET /V005

Hello Craig / Francis,

I write in respect of the schedule 5 letter reference permit variation application EPR/ZP3691ET/V005.

We have some queries with regard to the schedule 5 that are being addressed via our trade body (BMRA) with Alan Owers and Andy Bee (WEEE and metal recycling sector leads). The enquiry will delay the provision of information in response to the schedule 5. We hope to have some feedback following a meeting currently scheduled for Monday 19<sup>th</sup> June 2023, and hence we politely request a small extension of 1 week in order for these discussions to take place.

Kind Regards

Clare Haste

Environmental Partner, Europe  
Sims Limited

Telephone: +44 1789 722058  
Mobile: +44 7825 746770  
[www.simsltd.com](http://www.simsltd.com)



---

**From:** Harris, Craig <[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)>  
**Sent:** 19 May 2023 15:17  
**To:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>; Jennifer Stringer <[StringerJ@rpsgroup.com](mailto:StringerJ@rpsgroup.com)>  
**Cc:** Nwafor, Francis <[francis.nwafor@environment-agency.gov.uk](mailto:francis.nwafor@environment-agency.gov.uk)>  
**Subject:** SIMS Schedule 5 Request Application ZP3691ET /V005

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Clare, Jennifer,

Thankyou both for your time to discussing the draft schedule 5. Please find attached the schedule 5 request.

I look forward to seeing your responses.

Many Thanks

*Kind regards,*

**Craig Harris BSc (Hons), BA (Hons), PER  
Permitting Officer  
Environment Agency - East Midlands**

 07770 323461



 [Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)

 Environment Agency Trentside Offices, Scarrington Road, West Bridgford, Nottingham, NG2 5FA  
NG2 5BR (Sat Nav Friendly)



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**Table 3.244: Advantages and disadvantages associated with fabric filters**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• In general, fabric filters provide high abatement efficiencies for coarse and fine particles</li> <li>• Efficiency and pressure drop of continuously cleaned filters are relatively unaffected by large changes in inlet dust loads</li> <li>• Dust is separated dry without using consumables. The separated dust might be reused in the preceding process or recycled</li> <li>• Residual emissions are virtually independent of the intake concentration</li> <li>• Relatively simple operation</li> <li>• Reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Fabric filters are not suitable for wet or sticky dusts because of the risk of filter clogging</li> <li>• Heating the waste gas stream prevents condensation of fluid on the ceramic filters</li> <li>• Static electricity may hinder the cake from being removed from the fabric</li> <li>• Takes up a lot of space</li> </ul>

### Economics

The working life of filter material is about five years for fabric filters. Economics associated with fabric filters are given in Table 3.245.

**Table 3.245: Economics associated with fabric filters**

Type of costs	Costs		
	Fabric filter		
	Reverse-air	Mechanical shaker	Pulse-jet
Investment costs (per 1 000 Nm <sup>3</sup> /h)	EUR 1 000–4 500 <sup>(1)</sup>		
Filter material costs <sup>(2)</sup> (per 1 000 Nm <sup>3</sup> /h)	EUR 660–920 <sup>(1)</sup>		
Sonic horn costs <sup>(2)</sup> (per 1 000 Nm <sup>3</sup> /h)	USD 300–400 (EUR 320–430) <sup>(3,5)</sup>	USD 300–400 (EUR 320–430) <sup>(4,5)</sup>	NI
Reverse-jet equipment costs <sup>(2)</sup> (per 1 000 Nm <sup>3</sup> /h)	USD 600–1 200 (EUR 640–1 280) <sup>(3,5)</sup>	NI	NI
Operating costs (per 1 000 Nm <sup>3</sup> /h)	EUR 200–1 500 <sup>(1)</sup>		
Waste treatment costs (per t)	NI	NI	NI
Labour (h/week)	2 <sup>(1)</sup>		
Cost-effectiveness (per tonne of pollutant)	USD 58–372 (EUR 62–397) <sup>(3,5)</sup>	USD 41–334 (EUR 44–357) <sup>(4,5)</sup>	USD 46–293 (EUR 49–313) <sup>(5,6)</sup>
Cost-determining parameters	Pressure drop, and potential costs for conveying dust		
Benefits	Savings in costs of raw materials when reuse/recycling is possible, for instance in the glass industry		
<sup>(1)</sup> [ 176, Schenk et al. 2009 ]. <sup>(2)</sup> On top of the investment costs. <sup>(3)</sup> Cost data for 2002 [ 58, US EPA 2003 ]. Average currency conversion rate for 2002: EUR/USD = 0.9359. <sup>(4)</sup> Cost data for 2002 [ 56, US EPA 2003 ]. Average currency conversion rate for 2002: EUR/USD = 0.9359. <sup>(5)</sup> For pollutant loads of 9 g/Nm <sup>3</sup> and flow rates of between 1 700 000 Nm <sup>3</sup> /h (minimum costs) and 3 500 Nm <sup>3</sup> /h (maximum costs). <sup>(6)</sup> Cost data for 2002 [ 57, US EPA 2003 ]. Average currency conversion rate for 2002: EUR/USD = 0.9359. NB: NI = no information provided.			

## Finan, Frank

---

**From:** Clare Haste <clare.haste@simsmm.com>  
**Sent:** 18 August 2023 16:35  
**To:** Harris, Craig  
**Subject:** Re: SIMS Smethwick

Hi Craig,

Thanks for your email. Can we try for the 10mg AEL on 2<sup>nd</sup> point also as the existing system is damp suppression methods, so can't add a fabric filter with existing plant. I understand there are technical reasons why this isn't practicable, the damp particulates making the fabric filters inoperable. Please let me know how it goes.

Kind Regards and have a great weekend.

Sent from [Outlook for Android](#)

---

**From:** Harris, Craig <Craig.Harris@environment-agency.gov.uk>  
**Sent:** Wednesday, August 16, 2023 3:13:34 pm  
**To:** Clare Haste <clare.haste@simsmm.com>  
**Subject:** RE: SIMS Smethwick

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Clare

Would SIMS accept 5mg on the second extraction point ?. I will try to push it through on 10mg but I could get potential kick back. The difficulty is going to be that there is nothing in BAT which states bag filters can't be fitted in wet processes.

---

**From:** Clare Haste <clare.haste@simsmm.com>  
**Sent:** 16 August 2023 14:38  
**To:** Harris, Craig <Craig.Harris@environment-agency.gov.uk>  
**Subject:** RE: SIMS Smethwick

Hi Craig,

Please see responses below in blue.  
Any further questions, please do not hesitate to contact me.

Kind Regards

**Clare Haste**  
Environmental Partner, Europe  
Sims Limited

Telephone: +44 1789 722058  
Mobile: +44 7825 746770  
[www.simsltd.com](http://www.simsltd.com)



---

**From:** Harris, Craig <[Craig.Harris@environment-agency.gov.uk](mailto:Craig.Harris@environment-agency.gov.uk)>  
**Sent:** 16 August 2023 12:06  
**To:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>  
**Subject:** FW: SIMS Smethwick

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Clare

Another blunt question. Is that second extraction point emitting or is it sealed/covered ? [This is covered in response to your last bullet point below.](#)

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**From:** Harris, Craig  
**Sent:** 15 August 2023 15:13  
**To:** Clare Haste <[clare.haste@simsmm.com](mailto:clare.haste@simsmm.com)>  
**Subject:** SIMS Smethwick

Afternoon Clare,

I had a phone call from Alan Owers yesterday afternoon. Your probably aware that Alan visited the Smethwick site with the area officer Steve Rogers. He made me aware of a second extraction point on the shredder which is not being used.

There is an argument that if this extraction point was being used it would further reduce particulate matter. Is there an operational reason why this is not being used ?. I understand that Steve might be asking the question as well from a compliance perspective , but I want to progress the permit application and decisions need to be made. [Operationally, it has been beyond use dating back before current site management, but it is in the process of being reinstated. The second extraction point is called A1 and it is included in the existing permit, hence we require it to be included in the varied permit also please.](#)

We may well have the scenario on this second extraction point where 5mg AEL applies as this is not a direct extraction point from a shredder mill and a bag filter applies. Could you let me know what the extraction point was designed to do (e.g. does it take up lighter fractions) , and where is it in process order. [It is located after the first and second air systems and before the picking station. The heavy materials not collected by the first and second air systems \(metals and heavy wastes\) are presented via shakers to two rotary magnets, which lift the ferrous metal onto conveyors. The two rotary magnets are covered by an enclosure which is fitted with its own \(mini\) dust collection system. A fan pulls air from the magnet's enclosure, together with any particulates, and separates these particulates via a small cyclone / mini wet scrubber unit. This air system discharges to atmosphere via A1. An emissions limit of 10mg/Nm<sup>3</sup> is applicable as it is not applicable to fit a fabric filter on a damp suppression system as detailed in the Schedule 5 response.](#)

Is it sealed off this extraction point ? i.e. no fugitive emissions escaping. Essentially I need to be sure that the second extraction point does not do anything in addition to the first extraction. If it does, there has to be a practical to reason why its not being used to further reduce particulate matter. [There are not emissions from stack A1 as the unit / fan are not working. It is an additional mini extraction system as detailed above, it is in the process of being reinstated, so we would like it to be included as an emission point in the varied permit please. As per comment above, we consider 10mg AEL is applicable.](#)

Let me know.

Thanks Clare

***Kind regards,***



**Craig Harris BSc (Hons), BA (Hons), PER**  
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Guidance

# Surface water pollution risk assessment for your environmental permit

How to carry out a risk assessment if you are applying for a bespoke permit that includes discharging hazardous chemicals and elements to surface water.

From:

**Environment Agency** (</government/organisations/environment-agency>)

and **Department for Environment, Food & Rural Affairs**

(</government/organisations/department-for-environment-food-rural-affairs>)

Published

1 February 2016

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25 February 2022 —

## **Applies to England**

Guidance for Northern Ireland

(<https://www.doeni.gov.uk/topics/water/>)

Guidance for Scotland

(<https://www.sepa.org.uk/regulations/water/>)

Guidance for Wales

(<http://naturalresources.wales/apply-for-a-permit/water-discharges/?lang=en>)

## Contents

- When you do not need to carry out screening tests
- How to do your screening tests
- Screening tests: freshwaters
- Screening tests: estuaries and coastal waters
- Screening tests: discharges into cooling water which are then discharged to estuaries or coastal waters
- Screening test: ‘priority hazardous pollutants’
- Calculate the significant load using cleaned-up data
- Modelling
- Submit your results
- Contact

You must follow this guide if both of the following apply:

- you are applying for a permit that includes discharging hazardous chemicals and elements to surface water under the Environmental Permitting Regulations
- you need to carry out a [bespoke risk assessment](https://www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits) (<https://www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits>) – bespoke permits are environmental permits customised to your own activities and are usually required if your site produces emissions that exceed certain levels or multiple types of emissions

Read the [risk assessment overview](https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit) (<https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>) before reading this guide.

Hazardous chemicals and elements are listed in the following tables:

- [Estuaries and coastal waters specific pollutants and operational environmental quality standards](https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries_and_coastal_waters_specific_pollutants_and_o) ([https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries\\_and\\_coastal\\_waters\\_specific\\_pollutants\\_and\\_o](https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries_and_coastal_waters_specific_pollutants_and_o)

- [perational\\_environmental\\_quality\\_standards.ods](#)) (ODS, 8.3 KB)
- [Freshwaters specific pollutants and operational environmental quality standards](https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters_specific_pollutants_and_operational_environmental_quality_standards.ods) ([https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters\\_specific\\_pollutants\\_and\\_operational\\_environmental\\_quality\\_standards.ods](https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters_specific_pollutants_and_operational_environmental_quality_standards.ods)) (ODS, 7.88 KB)
  - [Estuaries and coastal waters priority hazardous substances, priority substances and other pollutants environmental quality standards](https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries_and_coastal_waters_priority_hazardous_substances_priority_substances_and_other_pollutants_environmental_quality_standards_2_.ods) ([https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries\\_and\\_coastal\\_waters\\_priority\\_hazardous\\_substances\\_priority\\_substances\\_and\\_other\\_pollutants\\_environmental\\_quality\\_standards\\_2\\_.ods](https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries_and_coastal_waters_priority_hazardous_substances_priority_substances_and_other_pollutants_environmental_quality_standards_2_.ods)) (ODS, 7.82 KB)
  - [Freshwaters priority hazardous substances, priority substances and other pollutants environmental quality standards](https://assets.publishing.service.gov.uk/media/6217c3eee90e0710c4506c57/Freshwaters_priority_hazardous_substances_priority_substances_and_other_pollutants_environmental_quality_standards_1_.ods) ([https://assets.publishing.service.gov.uk/media/6217c3eee90e0710c4506c57/Freshwaters\\_priority\\_hazardous\\_substances\\_priority\\_substances\\_and\\_other\\_pollutants\\_environmental\\_quality\\_standards\\_1\\_.ods](https://assets.publishing.service.gov.uk/media/6217c3eee90e0710c4506c57/Freshwaters_priority_hazardous_substances_priority_substances_and_other_pollutants_environmental_quality_standards_1_.ods)) (ODS, 6.87 KB)

Hazardous chemicals and elements are also known as specific substances.

You must evaluate and assess any hazardous chemicals and elements you plan to release into surface water. You must then carry out screening tests on the pollutants to check if they're a risk to the environment. This is called a specific substances assessment.

You must carry out screening tests when:

- you are applying for a new permit
- you need to change your permit to cover an increase in the amount of hazardous chemicals and elements you plan to discharge or if you plan to discharge a new hazardous pollutant
- you are applying to change (vary) your permit for another reason and there are potentially hazardous chemicals and elements in your discharge

Screening tests check the risk from hazardous chemicals and elements to the environment.

If your screening tests show there's a risk to the environment, the Environment Agency will tell you if more detailed tests need to be

carried out. The detailed tests are known as ‘modelling’:

- the Environment Agency may need to carry out modelling if you are discharging to freshwater (you will need to carry out modelling if it’s required if you are discharging to a lake or canal)
- you may need to carry out modelling if you are discharging to an estuary or coastal waters

## **When you do not need to carry out screening tests**

You do not usually need to carry out screening tests if you:

- discharge water taken from a river or groundwater to the same body of water you originally took it from
- have not added any additional hazardous chemicals and elements to the water

However, you do need to do screening tests if you:

- take the water from groundwater and discharge it to surface water
- use the water in a process which concentrates the existing pollutants before it’s discharged, for example water which is used for cooling and therefore partially evaporates
- keep the water before you discharge it and you make the quality of river worse than its quality when the water was taken

## **How to do your screening tests**

There are 3 stages to screening.

1. Identify the pollutants released from your plant.
2. Gather data on your pollutants before screening them.
3. Carry out screening tests on the data.

### **Identify the pollutants released from your plant**

You will need to produce a list of any hazardous chemicals and elements that are likely to be in the discharge from your site. Find potentially hazardous chemicals and elements in the following tables:

- Estuaries and coastal waters specific pollutants and operational environmental quality standards  
([https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries\\_and\\_coastal\\_waters\\_specific\\_pollutants\\_and\\_operational\\_environmental\\_quality\\_standards.ods](https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries_and_coastal_waters_specific_pollutants_and_operational_environmental_quality_standards.ods)) (ODS, 8.3 KB)
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- Estuaries and coastal waters priority hazardous substances, priority substances and other pollutants environmental quality standards  
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Pollutants are likely to be in the discharge if:

- they're allowed to be added to the discharge (for example water company trade effluent consent or discharges from installations)
- you've added them to the discharge (for example iron or aluminium to remove phosphorus). Read the Environment Agency's [guidance on dosed substances](http://www.gov.uk/government/publications/water-discharge-and-groundwater-activity-permits-additional-guidance) (<http://www.gov.uk/government/publications/water-discharge-and-groundwater-activity-permits-additional-guidance>) for the rules on this
- you've detected them using chemical analysis

To do chemical analysis you will need to take samples of the discharge and send them to a United Kingdom Accreditation Service (UKAS) accredited laboratory like the [National Laboratory Service](http://natlabs.co.uk/about-us/contact-us/) (<http://natlabs.co.uk/about-us/contact-us/>). Make sure the laboratory tests for all pollutants which you expect to find in the discharge and that they use an appropriate 'minimum reporting value' (MRV) (usually 10% of the environmental quality standards (EQS)).

You must submit the chemical analysis data that's been analysed to an appropriate MRV by a UKAS-accredited laboratory with your application. If you submit data which has not been analysed to an appropriate MRV you must tell the Environment Agency why, for example:

- samples may be from different sources (for example clean water, polluted water, sewerage discharge or industrial discharge) and may need to be diluted before they can be analysed
- the discharge may be diluted and analysis against the MRV may not be possible

### **Gather data on your pollutants before screening them**

You need to measure your pollutants if you release hazardous chemicals and elements into:

- freshwaters
- estuaries and coastal waters
- sewers

For each pollutant you will need:

- the chemical name of the pollutant being analysed
- the unit of measurement, for example micrograms per litre
- the maximum, minimum and average recorded concentrations of the pollutant in the discharge
- the maximum and average recorded discharge flow
- for freshwaters – the average concentration of the pollutants in the water upstream of the discharge if it's available (if not, you can use [estimated data](#)) and the 95% exceedence river flow (you can request this from the Environment Agency)
- for estuaries and coastal waters – the background concentrations at the discharge point
- total metal data (collect dissolved metal data at the same time in case any of your pollutants need modelling)
- a minimum of 12 samples (the ideal number is 36)
- the MRV used
- the relevant EQS

## Estimated data

You need to use estimated data for the screening tests if you do not have any discharge monitoring data, for example for new discharges that you are not yet discharging. For AA (annual average) EQS you need average discharge concentrations, with a minimum of 12 individual sample results from on-site tests or a proxy site (a similar sized site and manufacturing process which is likely to have a similar discharge). You will need to average your results – if you have a less than figure you must round it up to the nearest whole number (for example less than 10 is assumed to be 10).

## Intermittent discharge

If you discharge pollutants intermittently (for example you operate 12 hours a day, 5 days a week or you operate seasonally) you will need to work out the average flow rate to use in the screening tests.

If your discharge starts and stops regularly, for example once a day, you will need to work out the average flow rate during discharge and then multiply it by the proportion of the year that the discharge takes place. For example, if you discharge at 100 litres per second for 12 hours every day of the year, the average flow rate would be  $100 \times 0.5 = 50$  litres per second.

If your discharge runs for only part of the year, for example continuously for 6 months and then stops for 6 months, use the average flow rate during the 6 months you operate. For example, if you discharge at 100 litres per second continuously for 6 months and then stop discharging for the other 6 months, the average flow rate would be 100 litres per second.

Check with the [Environment Agency](#) if your discharge pattern is different to both of these examples.

## Background data for estuaries or coastal waters

You will need the following data on background pollutant concentrations to carry out the screening tests:

- for new pollutants that you have not discharged before – a sample of data from the planned discharge point



- for existing pollutants – a sample of data taken from a point away from the discharge point (so it's not affected by the discharge plume)
- for estuaries where the background quality can vary depending on the tide – use the maximum background value for the pollutant concentration rather than the average value

### **If you do not have upstream or background data for estuaries or coastal waters and freshwaters**

Assume that the concentration of each pollutant is 10% of the EQS in clean water (for example where there's no other discharges of the pollutant) and 50% of the EQS in polluted water (where there are other discharges of the pollutant). If you are unsure, assume that the upstream concentration is 50% of the EQS.

### **Calculate the concentration of pollutant in the discharge when discharging to a sewer**

Sewerage treatment works will remove a proportion of the pollutant in the discharge before it's discharged to a freshwater or estuary or coastal water. You must take this into account when you calculate the concentration of the hazardous chemical or element which you will discharge to the river or coastal water through the sewer.

The amount of each pollutant which will be removed by a sewerage works is known as the sewage treatment reduction factor. These factors have been calculated for each individual pollutant.

Use the following calculation to work out the concentration of the pollutant after sewage treatment:

Multiply the concentration of the pollutant in your discharge released to the sewer in milligrams per litre by the sewage treatment reduction factor in milligrams per litre.

You will need to average your results – if you have a less than figure you must round it up to the nearest whole number (for example less than 10 is assumed to be 10). For AA EQS, you should use the average release concentrations and for MAC EQS you should use the maximum release concentration.

Download the sewage treatment reduction factors:

- Sewage treatment reduction factors  
([https://assets.publishing.service.gov.uk/media/5a7584efed915d6faf2b39fd/Sewage\\_treatment\\_reduction\\_factors.csv](https://assets.publishing.service.gov.uk/media/5a7584efed915d6faf2b39fd/Sewage_treatment_reduction_factors.csv)) (MS Excel Spreadsheet, 9.79 KB)

## **Carry out screening tests on the data from the pollutants**

You must compare the measurements of pollutants from your discharge to the following:

- environmental quality standards (EQS) maximum allowable concentrations (MAC) – to evaluate the short term environmental impacts that your emissions can cause
- environmental quality standards (EQS) annual average (AA) – to evaluate the long term environmental impacts that your emissions can cause

The MAC and AA EQS for the pollutants are listed in the following tables:

- Estuaries and coastal waters specific pollutants and operational environmental quality standards  
([https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries\\_and\\_coastal\\_waters\\_specific\\_pollutants\\_and\\_operational\\_environmental\\_quality\\_standards.ods](https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries_and_coastal_waters_specific_pollutants_and_operational_environmental_quality_standards.ods)) (ODS, 8.3 KB)
- Freshwaters specific pollutants and operational environmental quality standards  
([https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters\\_specific\\_pollutants\\_and\\_operational\\_environmental\\_quality\\_standards.ods](https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters_specific_pollutants_and_operational_environmental_quality_standards.ods)) (ODS, 7.88 KB)
- Estuaries and coastal waters priority hazardous substances, priority substances and other pollutants environmental quality standards  
([https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries\\_and\\_coastal\\_waters\\_priority\\_hazardous\\_substances\\_priority\\_substances\\_and\\_other\\_pollutants\\_environmental\\_quality\\_standards\\_2.ods](https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries_and_coastal_waters_priority_hazardous_substances_priority_substances_and_other_pollutants_environmental_quality_standards_2.ods)) (ODS, 7.82 KB)
- Freshwaters priority hazardous substances, priority substances and other pollutants environmental quality standards  
(<https://assets.publishing.service.gov.uk/media/6217c3eee90e0710>)

Not all pollutants have both types of EQS.

When a pollutant has both an AA and MAC EQS, compare the measurements of pollutants from your discharge to the AA, apart from test 4 for freshwaters where you must use the MAC EQS as well.

You must compare the measurements of pollutants from your discharge to the MAC as well as the AA if you release it in batches rather than continuously.

Your discharge may contain other hazardous chemicals or elements that are not listed in the tables, for example, pesticides, biocides or disinfectants. You should include information about these with your permit application to the Environment Agency. You should also include measurements of these pollutants in your discharge or estimates of concentrations if you do not have measurements.

## Screening tests: freshwaters

Carry out the following tests to check whether your discharge of hazardous chemicals and elements to freshwaters is a risk to the environment. For each test you will need to provide more data than for the previous one. If your pollutant is screened out by a test, you do not need to complete the rest of the tests.

Contact the [Environment Agency](#) to get access to the screening tool to help you carry out these tests.

### Test 1

Check whether the concentration of the chemical and element in the discharge is more than 10% of the environmental quality standard (EQS).

If it's less than 10% you do not need to collect the data for the next 3 tests – you do not need to do anything more as your hazardous chemicals and elements are not a risk to the environment.

If it's more than 10%, carry out test 2.

If you have 2 or more discharges of the same chemical and element from different parts of your plant you will need to test them separately.

## Environmental quality standards (EQS) for freshwaters

Download the EQS for freshwaters:

- Freshwaters specific pollutants and operational environmental quality standards  
([https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters\\_specific\\_pollutants\\_and\\_operational\\_environmental\\_quality\\_standards.ods](https://assets.publishing.service.gov.uk/media/611299b08fa8f506a5bf13ca/Freshwaters_specific_pollutants_and_operational_environmental_quality_standards.ods)) (ODS, 7.88 KB)
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## Test 2

This test introduces the dilution available in the receiving water. You will need the river flow data and daily discharge volume for this test.

Check whether the process contribution (PC) of your chemical and element is more than 4% of the EQS. PC is the concentration of a discharged chemical and element in the water after it's been diluted.

Contact the [Environment Agency](#) to get the river flow data for the water you are discharging to.

Do the following steps to work out the PC.

1. Multiply the effluent flow rate (EFR) by the release concentration of the pollutant in the effluent (RC).
2. Add your value for the EFR to the river flow rate (RFR).
3. Divide the result of step 1 by the result of step 2.

If your value for PC is 4% or less of the EQS, you do not need to carry out tests 3 and 4.

If the PC is more than 4% of the EQS you will need to carry out tests 3 and 4.

### Test 3

You need the background concentration data (BC) for this test. Contact the [Environment Agency](#) to get the BC for the water you are discharging to or use estimated data.

Check whether your discharge increases the concentration of the pollutant in the river downstream of the discharge by more than 10% of the chemical and element's EQS value.

The predicted environmental concentration (PEC) in the water downstream of the discharge is a combination of the PC and background concentration.

To work out the PEC add the PC to the average BC.

If the result of step 2 in test 2 shows that the river flow rate is less than 10 times the effluent discharge flow rate you should also do the following calculation.

1. Multiply EFR by RC.
2. Multiply RFR by BC.
3. Add the results of step 1 and 2 together.
4. Add EFR to RFR.
5. Divide the result from step 3 by the result from step 4.

If the difference between BC and PEC is more than 10% of the EQS the Environment Agency will need to carry out [modelling](#) (if you are discharging to a canal or lake you will need to do the modelling). If it is not, carry out test 4.

### Test 4

Check whether the PEC is higher than the EQS.

If it is, the Environment Agency will need to carry out modelling (you will need to do the modelling if you are discharging to a canal or lake).

## Screening tests: estuaries and coastal waters

Carry out the following tests to check if your plant will discharge potentially hazardous chemicals and elements to estuaries and coastal waters. For each test you will need you to provide more data than for the previous one.

If your process involves using cooling water you must carry out these [alternative tests](#).

Contact the [Environment Agency](#) to get access to the screening tool to help you carry out these tests.

### Test 1

Check whether the level of pollutant in the discharge is more than the EQS limits. You need to test for both annual average limits and maximum allowable concentration if the chemical and element has both types of EQS.

If the chemical and element is more than EQS limits, carry out test 2. If it's below EQS limits you do not need to anything more as your pollutant is not a risk to the environment.

### Environmental quality standards (EQS) for estuaries and coastal waters

Download the EQS for estuaries and coastal waters:

- [Estuaries and coastal waters specific pollutants and operational environmental quality standards](https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries_and_coastal_waters_specific_pollutants_and_operational_environmental_quality_standards.ods) (https://assets.publishing.service.gov.uk/media/60e85aa08fa8f50c75b6ad32/Estuaries\_and\_coastal\_waters\_specific\_pollutants\_and\_operational\_environmental\_quality\_standards.ods) (ODS, 8.3 KB)
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## Test 2

Check whether you are discharging to the low water channel (if the water does not flow across the estuary bed at any stage of the tide) in the upper parts of an estuary where the water is mainly fresh.

If the discharge is direct to the low water channel, do the screening tests for freshwater starting at test 2.

In the calculations for freshwater tests 2 to 4 use the freshwater flow rate and upstream quality but use the EQSs for estuaries and coastal waters.

If these do not apply to your discharge site, carry out test 3.

## Test 3

Check whether your discharge is to a location with restricted dilution or dispersion.

Around the coast there are a number of locations where dilution, dispersion or flushing is too limited to carry out test 5. Examples are enclosed bays (such as Lulworth Cove in Dorset), docks and ports. In these locations there is limited exchange of water between the point of discharge and offshore waters.

If you need to check whether your discharge is to a location with restricted dilution or dispersion, email the Environment Agency at [Marine\\_Modelling\\_Requests@environment-agency.gov.uk](mailto:Marine_Modelling_Requests@environment-agency.gov.uk).

If your discharge is to a location with restricted dilution or dispersion, check the section on [modelling](#). If not, carry out test 4.

## Test 4

If the water you discharge to does not have restricted dilution or dispersion and the discharge is submerged at all states of the tide, you need to measure the minimum distance between the point you discharge waste water from and the point (or line) where the water depths are shown on nautical charts as zero (which is known as chart datum).

Use [online navigation charts](#)

<http://www.ukho.gov.uk/ProductsandServices/ADCatalogue/Pages/Home.aspx>) to check the location you are discharging to.

You will need to carry out [modelling](#) if the discharge contains pollutants at concentrations above EQS and either of the following apply:

- the discharge location is less than 50m offshore from where the sea bed is at chart datum
- the sea bed at the discharge location is less than 1m below chart datum

If these do not apply to your discharge site, carry out test 5.

## Test 5

You can only carry out this test if the discharge is buoyant.

Most discharges to estuaries and coastal waters are buoyant, as they are mainly freshwater discharges to a salty environment. If the discharge is not buoyant, for example if the receiving water is fresh, then you will need to carry out [modelling](#).

Check if the effective volume flux of the discharge is within the allowable limits.

The maximum effective volume flux you can work with is proportional to the water depth, for depths up to 3.5m below the depth of water at the point where chartered water depths are shown on nautical charts (chart datum). For example, if the water depth below chart datum is 2m the allowable effective volume flux is 2 cubic metres per second. For water depths more than 3.5m below chart datum, the allowable effective volume flux is fixed at 3.5 cubic metres per second.

Work out the effective volume flux of the discharge.

1. Multiply the effluent discharge rate (in cubic metres per second) by the release concentration of the chemical and element (in micrograms per litre).
2. Subtract the average background concentration of the discharge location from the EQS.
3. Divide the result of step 1 by the result of step 2.



Check your chemical and element against the maximum annual concentration (MAC) EQS as well as against the AA.

If the effective volume flux is more than the allowable effective volume flux for the discharge location you will need to carry out [modelling](#). If it's less you do not need to do anything further.

## **Screening tests: discharges into cooling water which are then discharged to estuaries or coastal waters**

You need to check how much the chemicals and elements are diluted by the cooling water in your plant before the discharge reaches the receiving water, to check whether modelling is needed.

Work out the predicted average concentration in the cooling water.

1. Multiply the average background concentration by the average cooling water flow.
2. Add the average load of the chemical and element in your waste stream to the result from step 1.
3. Add the average process waste stream flow to the average cooling water flow.
4. Divide the result of step 2 by the result of step 4.

Work out the predicted maximum concentration in the cooling water.

1. Multiply the maximum background concentration by the minimum cooling water flow.
2. Add the maximum load of the pollutant in your waste stream to the result from step 1.
3. Add the average process waste stream flow to the minimum cooling water flow.
4. Divide the result of step 2 by the result of step 4.

You will need to carry out [modelling](#) if the concentration of the chemical and element in the cooling water is more than the relevant EQS AA or MAC. If it's less you do not need to do anything further.

## **Screening test: 'priority hazardous pollutants'**

You must carry out additional screening for all priority hazardous pollutants for freshwaters and priority hazardous pollutants for coastal waters and estuaries even if the pollutants did not need [modelling](#) as a result of screening tests 1 to 4 for freshwaters or tests 1 to 5 for estuaries and coastal waters.

The priority hazardous pollutants are listed in the following tables:

- [Estuaries and coastal waters priority hazardous substances, priority substances and other pollutants environmental quality standards \(https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries\\_and\\_coastal\\_waters\\_priority\\_hazardous\\_substances\\_\\_priority\\_substances\\_and\\_other\\_pollutants\\_environmental\\_quality\\_standards\\_\\_2\\_.ods\)](https://assets.publishing.service.gov.uk/media/6217c303e90e0710be035467/Estuaries_and_coastal_waters_priority_hazardous_substances__priority_substances_and_other_pollutants_environmental_quality_standards__2_.ods) (ODS, 7.82 KB)
- [Freshwaters priority hazardous substances, priority substances and other pollutants environmental quality standards \(https://assets.publishing.service.gov.uk/media/6217c3eee90e0710c4506c57/Freshwaters\\_priority\\_hazardous\\_substances\\_\\_priority\\_substances\\_and\\_other\\_pollutants\\_environmental\\_quality\\_standards\\_\\_1\\_.ods\)](https://assets.publishing.service.gov.uk/media/6217c3eee90e0710c4506c57/Freshwaters_priority_hazardous_substances__priority_substances_and_other_pollutants_environmental_quality_standards__1_.ods) (ODS, 6.87 KB)

You need to find out whether the annual limit of pollutants you discharge is more than the significant load limit (an annual load limit that has been set for priority hazardous pollutants).

## Significant load limits

Pollutant	Annual significant load limit in kg
Anthracene	1
Brominated diphenyl ether	1
Cadmium	5
Chloroalkanes C10-13	1
Dioxins	0.0001

Endosulphan	1
Hexachlorobenzene	1
Heptachlor	1
Hexachlorobutadiene	1
Hexachloro-cyclohexane	1
Mercury and its compounds	1
Nonylphenol (4-Nonylphenol)	1
Pentachlorobenzene	1
Polycyclic aromatic Hydrocarbons (PAHs)	5
Tributyltin compounds (Tributyltin-cation)	1

### Calculate the significant load

1. Multiply the average discharge concentration by the average flow (litres a day).
2. Divide the result by 1,000 to give you mg a day.
3. Divide the result by 1,000 to give you g a day.
4. Divide the result by 1,000 to give you kg a day.
5. Multiply the result by 365 to give you kg a year.

Check your result against the relevant significant load in significant load limits table.

If the load you calculate is less than the significant load for the pollutant and the pollutant did not need modelling as a result of screening tests 1 to 4 for freshwaters or tests 1 to 5 for estuaries and coastal waters, the pollutant is insignificant and you do not need to do anything further.

If the load you calculate is less than the significant load for the pollutant and the pollutant did need [modelling](#) as a result of screening tests 1 to 4 for freshwaters or tests 1 to 5 for estuaries and coastal waters:

- the Environment Agency will need to carry out modelling if you are discharging to freshwater (except lakes and canals)
- you will need to carry out modelling if you are discharging to an estuary or coastal waters

If the load you calculate is more than the significant load for the pollutant, you must repeat the test with cleaned-up data (this means making some changes to make sure your data is accurate).

## Calculate the significant load using cleaned-up data

Repeat the significant load screening test using cleaned-up data.

If your calculations with cleaned-up data are more than the significant load for the pollutant, the Environment Agency will include an emission limit in your permit which will tell you how to control the pollutant.

If the pollutant did not pass one or more of the screening tests:

- the Environment Agency will need to carry out [modelling](#) if you are discharging to freshwater
- you will need to carry out [modelling](#) if you are discharging to an estuary or coastal waters

You do not need to do anything further if the load you calculate is less than the significant load for the pollutant and it passed tests 1 to 4 for freshwaters or 1 to 5 for estuaries and coastal waters.

## Cleaning up your data

Check that a minimum number of your samples exceed the MRV.

**Number of samples in assessment period**

**Minimum number of samples which need to be equal to or above the required MRV**

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12 to 14	4
15 to 20	5
21 to 27	6
28 to 34	7
35 to 41	8
42 to 48	9
49 to 56	10
57 to 63	11
64 to 71	12
72 to 79	13
80 to 86	14
87 to 94	15
95 to 102	16

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If a minimum number of your samples do not exceed the MRV, the pollutant is not a risk to the environment and you do not need to carry out modelling (this only applies if your MRV was 10% of the EQS or less).

Follow these steps to check that your data represent the current situation at your plant.

1. Check whether there are significant changes (changes that are obviously different when you look at the data particularly if you know the reasons for the change) in your data over a period of time, for example changes in effluent treatment or changes in trade inputs to a sewerage works.
2. If there are significant changes, select a time period which reflects

current quality even if this means using less than 3 years' data. Your data must include a minimum of 12 samples.

3. If your data is not evenly distributed, for example if there is seasonal variation, it can still be used, but you should consider the uneven spread when you interpret the results. You can analyse seasonal variation using a statistics package. You may need to contact the [Environment Agency](#) to help you interpret the data.
4. Check your data is current, for example, you should include any recent treatment processes that might have altered the discharge.
5. Check your data for very high or low values ('outliers') as these may not be accurate and could distort your data. For example, a value may be correct but relate to exceptional circumstances such as treatment failure, so you should not include it in your assessment. Or a value might be correct and a normal part of your activity, so you should include it in your assessment.

## Modelling

You need to [find a consultant \(https://www.endsdirectory.com/\)](https://www.endsdirectory.com/) to carry out detailed tests called modelling if your screening tests for estuaries and coastal waters did not screen out the pollutants. Consultants should contact the [Environment Agency](#) to find out about modelling and read the [guidance on carrying out modelling \(https://www.gov.uk/government/publications/modelling-surface-water-pollution-risk-assessment\)](https://www.gov.uk/government/publications/modelling-surface-water-pollution-risk-assessment).

We are updating our guidance on carrying out modelling. If you would like advice please [contact the Environment Agency](#).

The Environment Agency will carry out the modelling tests for you if your screening tests for freshwaters showed that your discharge is a risk to the environment, unless you are discharging into a lake or canal, then you must carry out modelling.

Modelling tests will show whether your discharge will cause pollution. If the modelling tests show that your discharge will cause pollution, the Environment Agency will include conditions to control the hazardous chemical or element in your permit or they may refuse your permit application if the impact on the environment is unacceptable.

## Submit your results

Submit the results of your screening tests to the Environment Agency along with your application for a new permit or to change an existing permit. You can submit your results in the screening tool if you have used this to carry out the tests.

You must also include the raw data you used for screening.

## Contact

Contact the Environment Agency if you have queries.

### General enquiries

National Customer Contact Centre  
PO Box 544  
Rotherham  
S60 1BY

Email [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

Telephone [03708 506 506](tel:03708506506)

Telephone from outside the UK (Monday to Friday, 8am to 6pm GMT) [+44 \(0\) 114 282 5312](tel:+44(0)1142825312)

Monday to Friday, 8am to 6pm.

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# Treating metal waste in shredders: appropriate measures for permitted facilities

From: [Environment Agency](#)  
(</government/organisations/environment-agency>)

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## 6. Emissions control appropriate measures

These are the appropriate measures for emissions control at regulated facilities with an environmental permit to mechanically treat metal waste in shredders.

1. You must identify, characterise and control emissions from your activities that may cause pollution. See our [guidance on controlling emissions \(https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit\)](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit).

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### 6.1 Point source emissions to air

1. You must contain the waste treatment plant (including shredders) to make sure you collect, extract and direct all process emissions to an



appropriate abatement system for treatment before release.

2. You must identify the main chemical constituents of the site's point source emissions as part of the site's inventory of emissions to air. You must include the speciation of volatile organic compounds (VOCs) if you have identified them in the emissions inventory and it is practicable to do so.

3. You must assess the fate and impact of the substances emitted to air, following the Environment Agency's [air emissions risk assessment methodology](https://www.gov.uk/guidance/air-emissions-risk-assessment-methodology) (<https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>).

4. To reduce point source emissions to air (for example, dust, VOCs and odour) from waste treatment, you must use an appropriate combination of abatement techniques, including one or more of the following systems:

- cyclonic filtration
- fabric filters
- wet scrubbing
- high efficiency particulate (HEPA) filter

5. You must assess and design vent and stack locations and heights to make sure dispersion capability is adequate.

6. Where monitoring is required, you must install suitable monitoring points. Monitoring points will be required to meet MCERTS standards. You can find further guidance in the Environment Agency's [M1 – Guidance on sampling requirements for monitoring stack emissions](https://www.gov.uk/government/publications/m1-sampling-requirements-for-stack-emission-monitoring) (<https://www.gov.uk/government/publications/m1-sampling-requirements-for-stack-emission-monitoring>).

7. Your procedures must make sure you correctly install, operate, monitor and maintain abatement equipment. For example, this includes monitoring and maintaining:

- appropriate flow and chemical concentration of scrubber liquor

- the handling and disposal or regeneration of spent scrubber or filter medium
- 

## 6.2 Fugitive emissions to air (including odour)

1. You must use appropriate measures to prevent emissions of dust, mud and litter and odour. See our guidance on suggested appropriate measures to [control dust, mud and litter](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#dust-mud-and-litter) (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#dust-mud-and-litter>) and to [control odour](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour) (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour>).

2. You must design, operate and maintain storage and treatment plant in a way that prevents fugitive emissions to air, including dust, organic compounds and odour. Where that is not possible, you must minimise these emissions.

Storage and treatment plant includes associated equipment and infrastructure such as:

- shredders
- conveyors
- skips or containers
- building fabric, including doors and windows
- pipework and ducting

3. You must minimise the number of potential diffuse dust and particulates emission sources, using a combination of the following:

- limiting the drop height of material
- using wind barriers
- covering conveyor belts, including enclosure of transfer points
- fitting spray nozzles or rubber flaps to the inlet and outlet of the shredder mill
- using misting systems and wind barriers in areas with significant dust formation
- venting pipe work and ducting to an appropriate abatement system to prevent fugitive emissions

4. To make sure fugitive emissions are collected and directed to appropriate abatement, your treatment plant must use high integrity components (for example, seals or gaskets).

5. You must use your waste pre-acceptance, waste acceptance and site inspection checks and procedures to identify and manage wastes that could cause, or are causing, fugitive emissions to air. Examples could include gas cylinders, items concealed in baled waste, or poorly depolluted ELVs. When you identify any of these wastes you must:

- take appropriate, risk assessed measures to prevent and control emissions
- prioritise their treatment or transfer

### **Storage of odorous or dusty wastes**

6. Where necessary, to prevent fugitive emissions to air from storing and handling odorous or dusty wastes, you should use a combination of the following measures (7 to 13).

7. You should store and handle the waste within an enclosed building including:

- light fractions of the shredder residue
- dust derived from sweeping the waste treatment and storage areas
- dust derived from the abatement equipment

8. You should use fully enclosed material transfer and storage systems and equipment, for example:

- conveyors
- hoppers
- containers
- tanks and skips

9. You should keep enclosed buildings and equipment under adequate negative pressure with an appropriate abated air circulation and extraction system. Where possible, locate air extraction points close to potential emissions sources.

10. You should:

- use fast-acting or 'airlock' doors that default closed
- dampen potential sources of diffuse dust emissions (such as the shredder inlet and outlet, traffic areas and open handling processes) with water or fog

11. You must fully enclose and contain pre- and post-treatment shredder plant to prevent emissions.

12. You must design and operate the shredder plant using appropriate process interlocks. The plant should not operate unless it is enclosed and contained, for example, only working when the loading door on the hopper is closed or sealed.

13. You must contain and extract dust emissions from the shredder plant to an appropriate abatement system, for example HEPA air filtration.

14. Where ambient dust monitoring is required it must be carried out by MCERTS qualified staff.

15. You must use monitoring equipment that meets as a minimum the MCERTS Performance Standards for Indicative Ambient Particulate Monitors. You must calibrate the equipment following the manufacturer's recommendations and it must be capable of providing representative data that accurately reflect PM10 levels produced operations at the site.

16. Where a [dust management plan](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#emissions-management-plan-for-dust) (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#emissions-management-plan-for-dust>) is required, you must develop and implement it following our guidance.

## **Maintenance and cleaning**

17. You must set up a leak detection and repair programme and use it to promptly identify and mitigate any fugitive emissions from treatment plant and associated infrastructure (for example, pipework, conveyors, tanks).

18. You must regularly inspect and clean all waste storage and treatment areas, equipment (including conveyor belts) and containers. You must contain any residues collected during cleaning.

19. Your maintenance and cleaning schedules must make sure that tanks and plant are regularly cleaned to avoid large-scale decontamination activities.

20. You must take measures to prevent the corrosion of plant and equipment (for example, conveyors or pipes). This includes:

- selecting and using appropriate construction materials
- lining or coating equipment with corrosion inhibitors
- regularly inspecting and maintaining plant

21. You must have an appropriate regular maintenance programme covering all buildings, plant and equipment. This must also include protective equipment such as air ventilation and extraction systems, curtains and fast-action doors used to prevent and contain fugitive releases.

22. If you wash out drums or containers, you must design and operate the washing process and associated equipment in a way that prevents fugitive emissions to air. For example, you could carry out this activity in a contained or enclosed system.

### **Odorous wastes**

23. You must have procedures to minimise the amount of time odorous wastes spend in your storage and handling systems (for example, pipes, conveyors, hoppers, tanks). In particular, you must have provisions to manage waste during periods of peak volume.

24. You must have measures to contain, collect and treat odorous emissions, including using contained buildings and plant or equipment with appropriate air extraction and abatement. We do not consider

masking agents to be appropriate measures to treat odorous emissions.

25. You must monitor odour abatement systems to ensure optimum performance. For example, you should make sure that scrubber liquors are maintained at the correct pH and replenished or replaced at an appropriate frequency.

26. Contaminated waters have potential for odours. You must store them in covered or enclosed tanks that are vented to abatement systems, or store them in containers.

27. Where you expect odour pollution at sensitive receptors, or it has been substantiated, you must periodically monitor odour emissions using European (EN) standards, for example either:

- dynamic olfactometry according to EN 13725 to determine the odour concentration
- EN 16841-1 or -2 to determine the odour exposure

If you use methods that are not covered by EN standards (for example, estimating odour impact), you should use ISO, national or other international standards to make sure you use data of an equivalent scientific quality. You must set out the monitoring frequency in the odour management plan.

28. Where you expect odour pollution at sensitive receptors, or it has been substantiated, you must also set up, implement and regularly review an odour management plan. It must be part of your management system and include all the following elements:

- actions and timelines to address any issues identified
- a procedure for conducting odour monitoring
- a procedure for responding to identified odour incidents, for example, complaints
- an odour prevention and reduction programme designed to identify the sources, to characterise the contributions of the sources and to implement prevention and reduction measures

29. Where an odour management plan is required, you must develop and implement it following our [odour management guidance](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour-management-plan) (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour-management-plan>).

## **Deflagration Management**

30. To prevent deflagrations and to reduce emissions where deflagrations have occurred, we may require a deflagration management plan. This should include:

- a deflagration reduction programme designed to identify the source, and to implement measures to prevent deflagrations, for example, inspecting waste input and removing dangerous items such as gas cylinders and undepolluted ELVs
- a review of historical deflagration incidents and remedies and sharing deflagration knowledge
- a protocol for responding to deflagration incidents

31. You must also have one or both of the following:

- pressure relief dampers, to relieve pressure waves from deflagrations that may otherwise cause damage and subsequent emissions
- pre-shredding – a low speed shredder installed upstream of the main shredder

32. Where there are a large number of deflagration incidents at a site, and other measures taken do not reduce the number, we may require you to install a pre-shredder.

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## **6.3 Emissions of noise and vibration**

1. You should design the layout of the facility to locate potential sources of noise (including building exits and entrances) away from sensitive receptors and boundaries. You should locate buildings, walls, and embankments so they act as noise screens.

2. You must use appropriate measures to control noise, including for example:

- adequately maintaining plant or equipment parts which may become more noisy as they deteriorate – for example, bearings, air handling plant, building fabric, and specific noise attenuation kit associated with plant or machinery
- closing doors and windows of enclosed areas and buildings
- avoiding noisy activities at night or early in the morning
- minimising drop heights and the movement of waste and containers
- using broadband (white noise) reversing alarms and enforcing the on-site speed limit
- using low-noise equipment, for example, drive motors, fans, compressors and pumps
- adequately training and supervising staff
- where possible, providing additional noise and vibration control equipment for specific noise sources – for example, noise reducers or attenuators, insulation, or sound-proof enclosures
- including pressure relief control on shredder plant enclosures to take account of possible deflagration incidents

3. Where you expect noise or vibration pollution at sensitive receptors, or it has been substantiated, you must create, use and regularly review a noise and vibration management plan. This must be part of your environmental management system, and must include:

- actions and timelines to address any issues identified
- a procedure for conducting noise and vibration monitoring
- a procedure for responding to identified noise and vibration events, for example, complaints

4. The noise and vibration management plan should also include a noise and vibration reduction programme designed to:

- identify the source(s) of noise and vibration
- measure or estimate noise and vibration exposure



- characterise the contributions of the sources
- implement prevention and reduction measures

5. Where a noise management plan is required, you must develop and implement it following our [noise management plan guidance](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#noise-and-vibration-management-plan) (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#noise-and-vibration-management-plan>).

This guidance also has information about noise and vibration risk assessments.

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## 6.4 Point source emissions to water and sewer

1. You must identify the main chemical constituents of the site's point source emissions to water and sewer as part of the site's inventory of emissions.

2. You must assess the fate and impact of the substances emitted to water and sewer following the Environment Agency's [risk assessment guidance](https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit) (<https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>).

3. Discharges to water or sewer must comply with the conditions of an environmental permit or trade effluent consent. Relevant sources of waste water include (but are not limited to):

- water or condensate collected from treatment processes
- vehicle washing
- vehicle oil and fuel leaks
- washing of containers
- spills and leaks in waste storage areas
- loading and unloading areas
- uncovered storage areas

4. To reduce emissions to water and sewer, if you need to treat waste water before discharge or disposal, you must use an appropriate combination of treatment techniques, including one or more of the following:

- preliminary or primary treatment – for example, physical separation
  - physico-chemical treatment – for example, adsorption, precipitation, chemical oxidation or reduction
  - solids removal – for example, coagulation, sedimentation, filtration or flotation
- 

## 6.5 Fugitive emissions to land and water

1. You must use appropriate measures to control potential fugitive emissions and make sure that they do not cause pollution. See the guidance on

[emissions to water](#)

(<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#emissions-to-water>) and [leaks from containers](#)

(<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#leaks-from-containers>).

2. You must have the following in all operational areas of the facility:

- an impermeable surface
- spill containment kerbs
- sealed construction joints
- a sealed drainage system

3. The sealed drainage system must contain all surface water run off and channel it to a blind sump unless you can lawfully discharge it.

4. You must collect and treat separately each water stream generated at the facility. For example, surface run-off water or process water. You must base separation on pollutant content and the treatment required. In particular, you must make sure you segregate uncontaminated water streams from those that require treatment.

5. You must use suitable drainage infrastructure to collect surface drainage from areas of the facility where you store, handle and treat waste. Drainage must be effective to make sure waste is not stored or treated in standing water.

6. Depending on the pollutant content, you must either:

- recirculate what you have collected
- discharge it in accordance with an environmental permit or trade discharge consent
- send it for further treatment

7. You must have design and maintenance provisions in place to detect and repair leaks. These must include regularly monitoring, inspecting and repairing equipment and minimising underground equipment and infrastructure.

8. You should provide appropriate buffer storage capacity at your facility to store waste waters, taking into account:

- potential abnormal operating scenarios and incidents
- the nature of any polluting substances and their impact on the downstream waste water treatment plant and receiving environment

9. You must have appropriate measures in place to monitor, treat and reuse the water held in the buffer storage before discharging.

10. You must take measures to prevent emissions from washing and cleaning activities, including:

- directing liquid effluent and wash waters to foul sewer or collecting them in a sealed system for off-site disposal – you must not discharge them to surface or storm drains
- where possible, using biodegradable and non-corrosive washing and cleaning products
- storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area, or in a building away from any surface water drains
- preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system

11. Where relevant, you must have measures to prevent pollution from the on-site storage, handling and use of oils and fuels. See the [guidance on oil storage regulations for business](https://www.gov.uk/guidance/storing-oil-at-a-home-or-business) (<https://www.gov.uk/guidance/storing-oil-at-a-home-or-business>).

## **Spill response plan**

12. You must produce and implement a spillage response plan and train staff to follow it and test it.

13. Your procedures and associated training must make sure you deal with spillages immediately.

14. You must keep spill kits at locations close to areas where a spillage could occur and make sure relevant staff know how to use them. Make sure kits are replenished after use.

15. You must stop spillages from entering drains, channels, gullies, watercourses and unmade ground. You must make available absorbent materials, sand or drain mats for use when required.

## **Designing and maintaining surfacing and subsurface structures**

16. You must make sure your spillage response plan includes information about how to recover, handle and correctly dispose of waste produced from a spillage.

17. For subsurface structures, you must:

- establish and record the routing of all site drains and subsurface pipework
- identify all sub-surface sumps and storage vessels
- engineer systems to minimise leakages from pipes and make sure they are detected quickly if they do occur, particularly where hazardous substances are involved, see the [list of hazardous substances](https://www.gov.uk/government/publications/values-for-groundwater-risk-assessments/hazardous-) (<https://www.gov.uk/government/publications/values-for-groundwater-risk-assessments/hazardous->

[substances-to-groundwater-minimum-reporting-values#list-of-hazardous-substances](#))

- provide secondary containment or leakage detection for sub-surface pipework, sumps and storage vessels
- establish an inspection and maintenance programme for all subsurface structures, for example, pressure tests, leak tests, material thickness checks or CCTV

18. For surfacing, you must design appropriate surfacing and containment or drainage facilities for all operational areas, taking into account:

- collection capacities
- surface thicknesses
- strength and reinforcement
- falls
- construction materials
- permeability
- resistance to chemical attack
- inspection and maintenance procedures

19. You must have an inspection and maintenance programme for impermeable surfaces and containment facilities.

## **Tanks and bunding**

20. You must bund all above-ground tanks containing liquids whose spillage could be harmful to the environment. Bunds must:

- be impermeable and resistant to the stored materials
- have no outlet (that is, no drains or taps) and drain to a blind collection point
- have pipework routed within bunded areas with no penetration of contained surfaces
- be designed to catch leaks from tanks or fittings
- have a capacity greater than 110% of the largest tank or 25% of the total tankage, whichever is the larger
- have regular visual inspections – any contents must be pumped out or otherwise removed under

manual control after checking for contamination

- be fitted with a high-level probe and an alarm (as appropriate) if not frequently inspected
- have tanker connection points within the bund (where possible), otherwise provide adequate containment
- have programmed engineering inspections – normally visual, but extending to water testing if structural integrity is in doubt
- be emptied of rainwater regularly to maintain their containment capacity

You can find further guidance in [Construction Industry Research and Information Association \(CIRIA\) Containment systems for the prevention of pollution \(C736F\)](https://www.ciria.org/ItemDetail?iProductCode=C736F&Category=FREEPUBS) (<https://www.ciria.org/ItemDetail?iProductCode=C736F&Category=FREEPUBS>)

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# Water Industry Act 1991

## 1991 CHAPTER 56

### PART IV

#### SEWERAGE SERVICES

#### CHAPTER III

#### TRADE EFFLUENT

#### *Consent for discharge of trade effluent into public sewer*

#### **118 Consent required for discharge of trade effluent into public sewer.**

(1) Subject to the following provisions of this Chapter, the occupier of any trade premises [<sup>F1</sup>in England] in the area of a sewerage undertaker may discharge any trade effluent proceeding from those premises into the undertaker's public sewers if he does so with the undertaker's consent.

[<sup>F2</sup>(1A) Subject to the following provisions of this Chapter and section 34D of the Environmental Protection Act 1990, the occupier of any trade premises in Wales in the area of a sewage undertaker may discharge any trade effluent proceeding from those premises into the undertaker's public sewers if the occupier does so with the undertaker's consent.]

(2) Nothing in this Chapter shall authorise the discharge of any effluent into a public sewer otherwise than by means of a drain or sewer.

(3) The following, that is to say—

- (a) the restrictions imposed by paragraphs (a) and (b) of section 106(2) above; and
- (b) section 111 above so far as it relates to anything falling within paragraph (a) or (b) of subsection (1) of that section,

shall not apply to any discharge of trade effluent which is lawfully made by virtue of this Chapter.

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*Changes to legislation: Water Industry Act 1991, Section 118 is up to date with all changes known to be in force on or before 23 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

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- (4) Accordingly, subsections (3) to (8) of section 106 above and sections 108 and 109 above shall have effect in relation to communication with a sewer for the purpose of making any discharge which is lawfully made by virtue of this Chapter as they have effect in relation to communication with a sewer for the purpose of making discharges which are authorised by subsection (1) of section 106 above.
- (5) If, in the case of any trade premises, any trade effluent is discharged without such consent or other authorisation as is necessary for the purposes of this Chapter, the occupier of the premises shall be guilty of an offence and liable—
- (a) on summary conviction, to a fine not exceeding the statutory maximum; and
  - (b) on conviction on indictment, to a fine.

#### Textual Amendments

- F1** Words in s. 118(1) inserted (6.4.2024) by Environment (Wales) Act 2016 (anaw 3), ss. 66(2)(a), 88(3)(b); S.I. 2023/1096, art. 3
- F2** S. 118(1A) inserted (6.4.2024) by Environment (Wales) Act 2016 (anaw 3), ss. 66(2)(b), 88(3)(b); S.I. 2023/1096, art. 3

#### Modifications etc. (not altering text)

- C1** S. 118 excluded (18.7.2023) by The Longfield Solar Farm Order 2023 (S.I. 2023/734), arts. 1, 6(1)
- C2** S. 118 excluded (3.8.2024) by The Gate Burton Energy Park Order 2024 (S.I. 2024/807), arts. 1, 6(1) (with art. 45, Sch. 14)
- C3** S. 118 excluded (27.9.2024) by The Cottam Solar Project Order 2024 (S.I. 2024/943), arts. 1, 6(1) (with art. 48, Sch. 15)



**Changes to legislation:**

Water Industry Act 1991, Section 118 is up to date with all changes known to be in force on or before 23 October 2024. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations.

[View outstanding changes](#)

**Changes and effects yet to be applied to the whole Act associated Parts and Chapters:**

Whole provisions yet to be inserted into this Act (including any effects on those provisions):

- Pt. 3 Ch. 2B inserted by [2014 c. 21 s. 12](#)
- s. 14B(6) inserted by [2024 c. 13 Sch. 30 para. 12\(4\)](#)
- s. 16B(11) inserted by [2024 c. 13 Sch. 30 para. 13\(4\)](#)
- s. 17(2)(aa) inserted by S.I. 2019/93, Sch. 1 para. 4(4)(b) (as substituted) by S.I. [2019/1245 reg. 21](#) (This amendment not applied to legislation.gov.uk. The affecting statutory instrument has no legal effect. It was made under a procedure which meant that it ceased to have effect 28 days after signing unless it was debated and approved in Parliament within that time. It was not debated and approved within 28 days, so it has expired with no effect.)
- s. 17A(c) repealed by [2014 c. 21 Sch. 5 para. 4\(2\)\(c\)](#)
- s. 17A(d) repealed by [2014 c. 21 Sch. 5 para. 4\(2\)\(c\)](#)
- s. 17A(2)(ba) and word inserted by [2014 c. 21 Sch. 5 para. 4\(2\)\(b\)](#)
- s. 17M(6) inserted by [2024 c. 13 Sch. 30 para. 14\(4\)](#)
- s. 17Q(11) inserted by [2024 c. 13 Sch. 30 para. 15\(4\)](#)
- s. 17R(2)(aa) inserted by S.I. 2019/93, Sch. 1 para. 4(7)(b) (as substituted) by S.I. [2019/1245 reg. 21](#) (This amendment not applied to legislation.gov.uk. The affecting statutory instrument has no legal effect. It was made under a procedure which meant that it ceased to have effect 28 days after signing unless it was debated and approved in Parliament within that time. It was not debated and approved within 28 days, so it has expired with no effect.)
- s. 17AA(1)(ba)(bb) inserted by [2014 c. 21 Sch. 5 para. 5\(2\)](#)
- s. 17BA(5A) inserted by [2014 c. 21 Sch. 5 para. 7\(3\)](#)
- s. 17HA(9)(b)(ia) inserted by [2014 c. 21 Sch. 5 para. 16\(2\)](#)
- s. 23(2AA) inserted by [2014 c. 21 Sch. 7 para. 35\(4\)](#)
- s. 23(8)(9) inserted by [2014 c. 21 Sch. 7 para. 35\(10\)](#)
- s. 31(10) inserted by [2024 c. 13 Sch. 29 para. 12](#)
- s. 39E-39H inserted by [2021 c. 30 s. 78\(7\)](#)
- s. 87(7C)-(7F) inserted by [2012 c. 7 s. 35\(6\)](#)
- s. 95ZA(6) inserted by [2014 c. 21 Sch. 5 para. 39\(4\)](#)
- s. 96ZA(2)-(5) substituted for s. 96ZA(2) by [2014 c. 21 Sch. 5 para. 40](#)
- s. 106B(3A) inserted by [2014 c. 21 Sch. 7 para. 94](#)
- s. 117G(2)(aa) inserted by [2014 c. 21 Sch. 5 para. 41\(2\)](#)
- s. 117G(4)-(4D) substituted for s. 117(4) by [2014 c. 21 Sch. 5 para. 41\(3\)](#)
- s. 117G(6)(aa) inserted by [2014 c. 21 Sch. 5 para. 41\(4\)](#)
- s. 117K(2)(aa) inserted by [2014 c. 21 Sch. 5 para. 42\(2\)](#)
- s. 117K(5)(5A) substituted for s. 117(5) by [2014 c. 21 Sch. 5 para. 42\(3\)](#)
- s. 117L(9) inserted by [2014 c. 21 Sch. 5 para. 43\(3\)](#)
- s. 117N(4)(aa) inserted by [2014 c. 21 Sch. 5 para. 45\(2\)](#)
- s. 117N(8)(aa) inserted by [2014 c. 21 Sch. 5 para. 45\(3\)](#)
- s. 117N(11)(aa) inserted by [2014 c. 21 Sch. 5 para. 45\(4\)](#)
- s. 117O(4)(aa) inserted by [2014 c. 21 Sch. 5 para. 46\(2\)](#)
- s. 117O(8)(aa) inserted by [2014 c. 21 Sch. 5 para. 46\(3\)](#)
- s. 117S(7)-(9) inserted by [2014 c. 21 Sch. 5 para. 49](#)
- s. 119(2)(ab) inserted by [2003 c. 37 s. 89\(1\)\(a\)](#)
- s. 119(3) inserted by [2003 c. 37 s. 89\(1\)\(b\)](#)
- s. 121(1)(ba) inserted by [2003 c. 37 s. 89\(2\)\(a\)](#)
- s. 141DC inserted by [2021 c. 30 s. 83](#)
- s. 177K(7)(aa) inserted by [2014 c. 21 Sch. 5 para. 42\(4\)](#)

- s. 207D and cross-heading inserted by 2014 c. 21 s. 39
- s. 207D(5) word repealed by 2014 c. 21 Sch. 5 para. 52(a)
- s. 207D(5) words inserted by 2014 c. 21 Sch. 5 para. 52(b)
- s. 213(1ZA) inserted by 2014 c. 21 Sch. 7 para. 119(3)
- s. 213(1ZA) repealed by 2014 c. 21 Sch. 5 para. 53

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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Severn Trent Water Limited  
Minworth Sewage Treatment Works  
Kingsbury Road  
Minworth  
Sutton Coldfield  
West Midlands  
B76 9HP

**Variation number**

T/10/36212/R/V005

**Permit number**

T/10/36212/R

# Minworth Sewage Treatment Works

## Permit number T/10/36212/R

### Introductory note

#### **This introductory note does not form a part of the notice.**

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

Minworth STW comprises 22 No. primary settlement tanks, 28 No. activated sludge lanes and 62 No. final settlement tanks. Final effluent is split and discharged to the River Tame at Water Orton (SP 17406 91455) and Coleshill (SP 20039 91371). Phosphorus removal is effected through biological nutrient removal within the modified ASP lanes with top-up-chemical dosing (using ferric sulphate) deployed as required. Flows in excess of 12,400 l/s are directed to the storm tanks (with total capacity of 127,264 m<sup>3</sup>) then discharged to the River Tame at SP 16479 91529. Sampling of the settled storm sewage takes place at SP 16276 91757.

This permit variation and consolidation is to reflect asset improvements that have been agreed between the Environment Agency and Severn Trent Water Limited as part of the National Environment Programme. Limits for the following chemicals and drivers have been imposed in the permit with start dates as indicated:

Dissolved zinc as Zn – 122 µg/l as a rolling 12 month mean – WFD\_NDLS\_Chem2 – 22/12/2022.

Dissolved nickel as Ni – 24 µg/l as a rolling 12 month mean – WFD\_NDLS\_Chem2 – 22/12/2022.

We consider that in reaching our decision to vary the permit we have taken into account all relevant considerations and legal requirements. We are satisfied that the permit will ensure that a high level of protection is provided for the environment and human health and that the activities will not give rise to any significant pollution of the environment or harm to human health.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Permit determined T/10/35431/R	31/03/2000	Permit issued to Severn Trent Water Limited.
Permit modified T/10/35431/R	23/08/2004	Notice of modification to delete and replace Condition 11 on Schedule 01.
Permit modified T/10/35431/R	21/03/2005	Notice of modification to substitute conditions for ammoniacal nitrogen (expressed as N) limits and the capacity of storm tanks.
Permit modified T/10/35431/R	30/12/2005	Notice of modification to delete and replace Flow Measurement and Composition conditions.
Permit modified T/10/36212/R	03/05/2006	Permit modified and renumbered T/10/36212/R.
Permit modified T/10/36212/R	30/08/2007	Notice of modification to delete and replace Condition 11 on Schedules 01 and 02. Iron limit added on both schedules.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Permit modified T/10/36212/R	14/10/2008	Notice of modification to add Operator Self-Monitoring requirements to the permit.
Permit modified T/10/36212/R	26/03/2010	Notice of modification to substitute conditions for Volume, Flow Measurement and Urban Wastewater Treatment Regulations.
Permit modified T/10/36212/R	30/03/2010	Notice of modification to update the Dry Weather Flow and Flow Measurement conditions.
Application T/10/36212/R/V001	Duly made 30/04/2012	Application to vary flow distribution of final effluent.
Variation determined T/10/36212/R	02/07/2012	Varied permit issued.
Application T/10/36212/R/V002 (variation and consolidation)	Duly made 12/12/2013	Application to review the iron limit and bring forward the effective date to meet the phosphorus obligation.
Variation determined T/10/36212/R	27/02/2014	Varied and consolidated permit issued in modern condition format.
Application T/10/36212/R/V003 (variation and consolidation)	Duly made 27/10/2017	Application to vary the permit to remove the total mercury limit.
Variation determined T/10/36212/R	08/01/2018	Varied and consolidated permit issued in modern condition format.
Environment Agency initiated variation T/10/36212/R/V004 (variation and consolidation)	12/08/2021	Variation of permit initiated under PR14 review programme to incorporate improvements to be delivered under AMP6 and to incorporate the DWF 3 in 5 year and data quality conditions.
Variation determined T/10/36212/R	09/11/2021	Varied and consolidated permit issued in modern condition format.
Environment Agency initiated variation T/10/36212/R/V005 (variation and consolidation)	28/09/2022	Variation of permit initiated under PR19 review programme to incorporate improvements to be delivered under AMP7.
Variation determined T/10/36212/R	16/12/2022	Varied and consolidated permit issued in modern condition format.

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

### Permit number

T/10/36212/R

### Issued to

**Severn Trent Water Limited** (“the operator”)

whose registered office is

**Severn Trent Centre**

**2 St John’s Street**

**Coventry**

**CV1 2LZ**

company registration number **02366686**

to operate water discharge activities at

**Minworth Sewage Treatment Works**

**Kingsbury Road**

**Minworth**

**Sutton Coldfield**

**West Midlands**

**B76 9HP**

to the extent set out in the schedules.

The notice shall take effect from 22/12/2022

Name	Date
Roger Horton	16/12/2022

Authorised on behalf of the Environment Agency

## **Schedule 1**

Only conditions 2.2.1, 3.1.2, 3.1.6, 3.1.7, 3.3.4, 3.3.9, Table S3.1, Schedule 3A, Schedule 3D, Table S4.1, Table S4.2 Schedule 5 and Schedule 6 have been varied by the consolidated permit T/10/36212/R as a result of an Environment Agency initiated variation.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**T/10/36212/R**

This is the consolidated permit referred to in the variation and consolidation notice for variation T/10/36212/R/V005 authorising,

**Severn Trent Water Limited** (“the operator”),

whose registered office is

**Severn Trent Centre  
2 St John’s Street  
Coventry  
CV1 2LZ**

company registration number **02366686**

to operate water discharge activities at

**Minworth Sewage Treatment Works  
Kingsbury Road  
Minworth  
Sutton Coldfield  
West Midlands  
B76 9HP**

to the extent authorised by and subject to the conditions of this permit.

<b>Name</b>	<b>Date</b>
<b>Roger Horton</b>	<b>16/12/2022</b>

Authorised on behalf of the Environment Agency



# Conditions

## 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

## 2 Operations

### 2.1 Permitted activities

- 2.1.1 The only activities authorised by the permit are the activities specified in schedule 1 table S1.1.

### 2.2 The site

- 2.2.1 The discharge activities shall take place at the discharge points marked on the site plans at schedule 7 to this permit, and as listed in table S3.2; and, the operating techniques that are the subject of conditions prefixed by 2.3 shall be applied at the locations shown, or otherwise described, in schedule 7.

### 2.3 Operating techniques

- 2.3.1 For the activities A1 and A2 referenced in schedule 1, table S1.1 the operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.
- 2.3.2 For the discharge(s) specified in table S3.3:
- (a) The discharge shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt.
  - (b) Off-line storm storage must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt and shall be emptied and its contents returned to the continuation flow as soon as reasonably practicable. The minimum off-line storm storage required is specified in table S3.3.
  - (c) The discharge shall not be comminuted or macerated and shall have passed through screens as specified and shall not contain a significant quantity of solid matter with a particle size greater than any indicated. All screenings shall be removed from the discharge.
  - (d) Where a mechanically cleaned screen is installed, a telemetry alarm system shall be installed and maintained, as far as reasonably practicable, so as to give the operator immediate notification of a failure of the screen cleaning mechanism, unless otherwise agreed in writing by the Environment Agency. The operator shall take all appropriate measures to return the screen

cleaning mechanism to normal operation as soon as reasonably practicable after receipt of notification of the failure.

- (e) Event duration monitoring telemetry equipment shall be installed and maintained, as far as reasonably practicable, so as to give the operator notification as soon as reasonably practicable, of a failure of the event duration monitoring equipment, unless otherwise agreed in writing by the Environment Agency. The operator shall take all appropriate measures to return event duration monitoring equipment to normal operation as soon as reasonably practicable after receipt of notification of the failure.

2.3.3 For the activity A3 referenced in schedule 1, table S1.1 where the discharge results in unsatisfactory solid matter being visible in the receiving waters or on the banks or shoreline, in the vicinity of the outfall, the operator shall take all reasonable steps to collect and remove such matter as soon as reasonably practicable.

## **3 Emissions and monitoring**

### **3.1 Emissions to water**

3.1.1 The limits given in schedule 3 table S3.1 shall not be exceeded.

3.1.2 The limits in schedule 3 table S3.1 to which this condition applies may be exceeded where: in any series of samples of the discharge taken at regular but randomised intervals in any period of twelve consecutive months as listed in column 1 of schedule 3A - 95 percentile look up table, no more than the relevant number of samples, as listed in column 2 of schedule 3A - 95 percentile look up table, exceed the applicable limit for that relevant parameter. For relevant parameters subject to schedule 3C the assessment is based on a fixed calendar year from 1 January to 31 December inclusive.

3.1.3

- (a) For the emission limits in schedule 3 table S3.1 to which this condition applies, no sample of the discharge taken at a time when unusual weather conditions are adversely affecting the operation of the waste water treatment works, shall be taken into account in deciding whether or not the emission limit has been complied with.
- (b) On any occasion where unusual weather conditions adversely affect the operation of the waste water treatment works, the operator shall use its best endeavours to mitigate that adverse effect.
- (c) For any sample of the discharge taken to be considered for the purposes of (a) above, the operator shall notify the Environment Agency in writing within 14 days of becoming aware that an emission limit has been exceeded. That notification shall include a full description of the unusual weather conditions and their impact on the operation of the works.

3.1.4

- (a) For the emission limits in schedule 3, table S3.1 to which this condition applies, no sample of the discharge taken at a time when abnormal operating conditions are adversely affecting the operation of the waste water treatment works, shall be taken into account in deciding whether or not the emission limit has been complied with.
- (b) On any occasion where abnormal operating conditions adversely affect the operation of the waste water treatment works, the Operator shall use its best endeavours to mitigate that adverse effect.
- (c) For any sample of the discharge taken to be considered for the purposes of (a) above, the Operator shall notify the Environment Agency in writing within 14 days of becoming aware that an emission limit has been exceeded. That notification shall include a full description of the abnormal operating conditions and their impact on the operation of the works.

- 3.1.5 The permitted Dry Weather Flow limit in schedule 3 table S3.1 is set at the operator's planned annual 80% exceeded daily volume discharged.
- (a) For compliance purposes an exceedance shall be recorded for a calendar year only when the limit in effect on 31 December of that calendar year is exceeded by 90% or more of the 'good' recorded Total Daily Volumes in that calendar year.
  - (b) Up to and including 31 December 2025:
    - (i) If an exceedance of the Dry Weather Flow limit is recorded in a calendar year then the operator shall, as soon as is reasonably practicable, investigate the reasons for the exceedance.
    - (ii) The operator shall report the reasons for the exceedance to the Environment Agency and the steps that it proposes to take to restore compliance.
    - (iii) An exceedance of the Dry Weather Flow limit shall not be recorded as a failure of the Dry Weather Flow limit in that calendar year if the operator takes appropriate steps to restore compliance.
  - (c) From the 1 January 2026 the limit has been complied with in an assessment calendar year unless;
    - (i) the limit was exceeded in the compliance assessment calendar year, and;
    - (ii) two or more exceedances have occurred in the preceding 4 calendar years.
- 3.1.6 The limits in schedule 3 table S3.1 to which this condition applies are assessed using any series of samples of the discharge taken at regular but randomised intervals in any period of twelve consecutive months.
- 3.1.7 The emission limits in schedule 3 table S3.1 to which this condition applies shall have been complied with if the lower bound 90% confidence interval calculated in accordance with schedule 3D is less than or equal to that emission limit.

## **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 For the activities A1 and A2 referenced in schedule 1, table S1.1 the operator shall take appropriate measures to minimise so far as reasonably practicable the polluting effects of the emissions of substances in the discharge not controlled by emission limits (excluding odour).

## **3.3 Monitoring**

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.4;
  - (b) inlet quality specified in tables S3.1 and S3.4
- 3.3.2 The operator shall maintain records of all monitoring required by this permit.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.3.4 Accessible monitoring points shall be provided and maintained to enable the emissions monitoring programme and/or other monitoring to be carried out at the monitoring points specified in table S3.4 of schedule 3 and shown marked on the site plans in schedule 7.

- 3.3.5 The monitoring programme for the parameters subject to schedule 3B shall be:
- (a) pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and
  - (b) spot samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.
- 3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3B Monitoring Programme pre-scheduled date, or is lost, or a result for that sample cannot be reported, the operator shall record the details and reschedule the sample.
- 3.3.7 The monitoring programme for the parameters subject to schedule 3C shall be:
- (a) pre-scheduled before each calendar year;
  - (b) Unless otherwise agreed in writing by the Environment Agency, the operator shall submit the monitoring programme for the following calendar year to the Environment Agency before the 1<sup>st</sup> of December; and
  - (c) samples must be collected at approximately equal intervals during the year from different days of the week and approximately 10% of samples should be taken at weekends.
- 3.3.8 Unless otherwise agreed in writing by the Environment Agency, after becoming aware, or following notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample cannot be reported, the operator shall notify the Environment Agency of the missed event and the reschedule date as soon as reasonably practicable.
- 3.3.9 For the activity A3 referenced in schedule 1, table S1.1 an event duration monitoring telemetry system shall be installed and maintained, as far as reasonably practicable so as to give the operator data available of discharge occurrence (start and stop) at the frequency defined in table S3.1.
- 3.3.10
- (a) Total Daily Volumes shall be calculated from the average of the available 'good' 15 minute flow readings taken from midnight to midnight where:  

$$\text{Total Daily Volume (m3)} = \{\text{Sum of 'good' readings (l/s)} / \text{number of 'good' readings}\} \times \{86,400 \text{ (s)} / 1000\}.$$

Where there are 87 or more 'good' 15 minute flow readings the Total Daily Volume shall be reported as 'good', where there are 1 – 86 'good' readings it shall be reported as 'suspect' and where there are no 'good' readings as 'missing'.
  - (b) The operator shall record all failures of the flow measurement system and any other breaks in the flow record and the reasons for all issues, failures and breaks that lead to missing or suspect Total Daily Volume records and all steps taken to prevent a re-occurrence.
  - (c) There shall be no more than 37 days and/or no more than 14 consecutive days with 'suspect' or 'missing' Total Daily Volumes in a calendar year, unless otherwise agreed in writing by the Environment Agency.
  - (d) All 15 minute flow readings shall be flagged as 'good', 'suspect' or 'missing' using an appropriate methodology set out in the operator's flow monitoring quality management system.

## 4 Information

### 4.1 Records

4.1.1 All records required to be made by schedule 3, 4 and 5 to this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made.

4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plan and management system required to be maintained by this permit.

### 4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Within the time period after the end of the reporting period specified in schedule 4 table S4.1 the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and monitoring points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

4.3.1 The Environment Agency shall be notified as soon as reasonably practicable following detection, within the site of the regulated facility of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution; and
- (b) any breach of a limit specified in schedule 3 table S3.1 (including individual exceedances of limits which are covered by condition 3.1.2).

Any other significant adverse environmental effects, which may have been caused by the activity, shall also be notified to the Environment Agency as soon as reasonably practicable following detection.

4.3.2 The information provided under condition 4.3.1 shall be supported by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling specified in schedule 3B/3C, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

4.3.5 For the activities A1 and A2 referenced in schedule 1, table S1.1 where the operator proposes to make a change in the nature of the activity by increasing the concentration of, or the addition of, or allowing the introduction of, a substance to the activity to an extent that the operator considers could have a significant adverse environmental effect on the receiving waters, and the change is not permitted by emission limits specified within schedule 3 table S3.1 or the subject of an application for approval under the EP Regulations or under the terms of this permit:

- (a) the Environment Agency shall be notified in writing at least 14 days before the increase or addition or allowing the introduction; and
- (b) the notification shall contain a description of the proposed change.

4.3.6 For the activities A1 and A2 referenced in schedule 1, table S1.1 the operator shall inform the Environment Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Urban Waste Water Treatment (England and Wales) Regulations 1994 and shall, on request, inform the Environment Agency in writing of the actual population equivalent.

## 4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "as soon as reasonably practicable", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 Activities		
Activity reference	Description of activity	Limits of specified activity
A1	Discharge of secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 1)	<p>Flows up to and including 7,000 litres per second (604,800 m<sup>3</sup>d<sup>-1</sup>) shall be split in a ratio of 50:50 between Activity A1 and Activity A2. The overflow weir shall be designed and constructed to ensure that no more than 3,500 litres per second of secondary treated sewage effluent with nutrient removal shall be discharged via Final Effluent Outfall (Outlet 1) under these flow conditions.</p> <p>Flows in excess of 7,000 litres per second (604,800 m<sup>3</sup>d<sup>-1</sup>) shall be split in a ratio of 30:70 between Activity A1 and Activity A2. The overflow weir shall be designed and constructed to ensure that no more than 4,000 litres per second of secondary treated sewage effluent with nutrient removal shall be discharged via Final Effluent Outfall (Outlet 1) under these flow conditions.</p> <p>The total combined flow of secondary treated sewage effluent with nutrient removal discharged via Final Effluent Outfall (Outlet 1) and Final Effluent Outfall (Outlet 2) shall be measured at the agreed Flow Monitoring Point stated in Table S3.4.</p>

<b>Table S1.1 Activities</b>		
<b>Activity reference</b>	<b>Description of activity</b>	<b>Limits of specified activity</b>
A2	Discharge of secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 2)	<p>Flows up to and including 7,000 litres per second (604,800 m<sup>3</sup>d<sup>-1</sup>) shall be split in a ratio of 50:50 between Activity A1 and Activity A2. The overflow weir shall be designed and constructed to ensure that no more than 3,500 litres per second of secondary treated sewage effluent with nutrient removal shall be discharged via Final Effluent Outfall (Outlet 2) under these flow conditions.</p> <p>Flows in excess of 7,000 litres per second (604,800 m<sup>3</sup>d<sup>-1</sup>) shall be split in a ratio of 30:70 between Activity A1 and Activity A2. The overflow weir shall be designed and constructed to ensure that no more than 8,400 litres per second of secondary treated sewage effluent with nutrient removal shall be discharged via Final Effluent Outfall (Outlet 2) under these flow conditions.</p> <p>The total combined flow of secondary treated sewage effluent with nutrient removal discharged via Final Effluent Outfall (Outlet 1) and Final Effluent Outfall (Outlet 2) shall be measured at the agreed Flow Monitoring Point stated in Table S3.4.</p>
A3	Discharge of settled storm sewage via Settled Storm Outfall (Outlet 3)	N/A

## **Schedule 2 – Waste types, raw materials and fuels**

Schedule 2 not in use.



## Schedule 3 – Emissions and monitoring

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
A1 Secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 1)	Dry weather flow	225,000 m <sup>3</sup> /day	Total daily volume	N/A	Continuous	Combined DWF of Activities A1 and A2 shall not exceed 450,000 m <sup>3</sup> /day as a maximum  Condition 3.1.5 applies
	15-minute instantaneous or averaged flow	No limit set. Record as l/s	15 minute	N/A	Continuous	N/A
	ATU-BOD as O <sub>2</sub>	15 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	ATU-BOD as O <sub>2</sub>	50 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Ammoniacal nitrogen (expressed as N)	3 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Ammoniacal nitrogen (expressed as N)	12 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Suspended solids (measured after drying at 105°C)	25 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)

<b>Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Effluent(s) and discharge point(s)</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Limit of effective range</b>	<b>Monitoring frequency</b>	<b>Compliance Statistic</b>
	Total iron as Fe	3,500 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Total iron as Fe	8,000 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Dissolved zinc as Zn	122 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Rolling 12 month mean (Conditions 3.1.3, 3.1.6, 3.1.7 and schedule 3D apply)
	Dissolved nickel as Ni	24 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Rolling 12 month mean (Conditions 3.1.3, 3.1.6, 3.1.7 and schedule 3D apply)
	Antimony as Sb	5 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Arsenic as As	12 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Cadmium as Cd	1 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Chloroform as CHCl <sub>3</sub>	8 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
	Trichloroethylene as C <sub>2</sub> HCl <sub>3</sub>	4 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Visible oil or grease	No significant trace present so far as is reasonably practicable	Instantaneous (visual examination)	N/A	N/A	No significant trace (Condition 3.1.3 applies)
	ATU-BOD as O <sub>2</sub> (UWWTR)	Minimum of 70 % removal compared to influent	24 hour composite	To be compliant a sample has to meet the 70% removal standard or the 25 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	ATU-BOD as O <sub>2</sub> (UWWTR)	25 mg/l				
	ATU-BOD as O <sub>2</sub> (UWWTR)	50 mg/l	24 hour composite	This limit does not apply if a sample has met the 70% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)
	COD as O <sub>2</sub> (UWWTR)	Minimum of 75 % removal compared to influent	24 hour composite	To be compliant a sample has to meet the 75% removal standard or the 125 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	COD as O <sub>2</sub> (UWWTR)	125 mg/l				
	COD as O <sub>2</sub> (UWWTR)	250 mg/l	24 hour composite	This limit does not apply if a sample has met the 75% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)
	Total phosphorus as P (UWWTR)	1 mg/l	24 hour composite		As specified in schedule 3C	Calendar year mean

<b>Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Effluent(s) and discharge point(s)</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Limit of effective range</b>	<b>Monitoring frequency</b>	<b>Compliance Statistic</b>
	Total phosphorus as P (UWWTR)	Minimum of 80% removal compared to influent		To be compliant the discharge has to meet the 80% removal standard or the 1 mg/l limit not both		(Condition 3.1.4 applies)
A2 Secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 2)	Dry weather flow	225,000 m <sup>3</sup> /day	Total daily volume	N/A	Continuous	Combined DWF of Activities A1 and A2 shall not exceed 450,000 m <sup>3</sup> /day as a maximum  Condition 3.1.5 applies
	15-minute instantaneous or averaged flow	No limit set. Record as l/s	15 minute	N/A	Continuous	N/A
	ATU-BOD as O <sub>2</sub>	15 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	ATU-BOD as O <sub>2</sub>	50 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Ammoniacal nitrogen (expressed as N)	3 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Ammoniacal nitrogen (expressed as N)	12 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)

<b>Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Effluent(s) and discharge point(s)</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Limit of effective range</b>	<b>Monitoring frequency</b>	<b>Compliance Statistic</b>
	Suspended solids (measured after drying at 105°C)	25 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Total iron as Fe	3,500 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Total iron as Fe	8,000 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Dissolved zinc as Zn	122 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Rolling 12 month mean (Conditions 3.1.3, 3.1.6, 3.1.7 and schedule 3D apply)
	Dissolved nickel as Ni	24 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Rolling 12 month mean (Conditions 3.1.3, 3.1.6, 3.1.7 and schedule 3D apply)
	Antimony as Sb	5 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Arsenic as As	12 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Cadmium as Cd	1 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)

<b>Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Effluent(s) and discharge point(s)</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Limit of effective range</b>	<b>Monitoring frequency</b>	<b>Compliance Statistic</b>
	Chloroform as CHCl <sub>3</sub>	8 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Trichloroethylene as C <sub>2</sub> HCl <sub>3</sub>	4 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Visible oil or grease	No significant trace present so far as is reasonably practicable	Instantaneous (visual examination)	N/A	N/A	No significant trace (Condition 3.1.3 applies)
	ATU-BOD as O <sub>2</sub> (UWWTR)	Minimum of 70 % removal compared to influent	24 hour composite	To be compliant a sample has to meet the 70% removal standard or the 25 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	ATU-BOD as O <sub>2</sub> (UWWTR)	25 mg/l				
	ATU-BOD as O <sub>2</sub> (UWWTR)	50 mg/l	24 hour composite	This limit does not apply if a sample has met the 70% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)
	COD as O <sub>2</sub> (UWWTR)	Minimum of 75 % removal compared to influent	24 hour composite	To be compliant a sample has to meet the 75% removal standard or the 125 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	COD as O <sub>2</sub> (UWWTR)	125 mg/l				
	COD as O <sub>2</sub> (UWWTR)	250 mg/l	24 hour composite	This limit does not apply if a sample has met the 75% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)

<b>Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Effluent(s) and discharge point(s)</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Limit of effective range</b>	<b>Monitoring frequency</b>	<b>Compliance Statistic</b>
	Total phosphorus as P (UWWTR)	1 mg/l	24 hour composite	To be compliant the discharge has to meet the 80% removal standard or the 1 mg/l limit not both	As specified in schedule 3C	Calendar year mean (Condition 3.1.4 applies)
	Total phosphorus as P (UWWTR)	Minimum of 80% removal compared to influent				
A3 Settled storm sewage via Settled Storm Outfall (Outlet 3)	Settled storm sewage discharge event duration monitoring (discharge / no discharge)	N/A	N/A	Condition 3.3.3 does not apply	2 minute	N/A
	Settled storm sewage discharge start and end times	N/A	N/A	Condition 3.3.3 does not apply	Whenever a discharge occurs	N/A
	Settled storm sewage discharge event duration monitoring status (operational / not operational)	N/A	N/A	Condition 3.3.3 does not apply	2 minute	N/A

<b>Effluent Name</b>	<b>Discharge Point</b>	<b>Discharge point NGR</b>	<b>Receiving water/Environment</b>
A1 Secondary treated sewage effluent with nutrient removal	Final Effluent Outfall (Outlet 1)	SP 17406 91455	River Tame
A2 Secondary treated sewage effluent with nutrient removal	Final Effluent Outfall (Outlet 2)	SP 20039 91371	River Tame
A3 Settled storm sewage	Settled Storm Outfall (Outlet 3)	SP 16479 91529	River Tame

<b>Effluent(s) and discharge point(s)</b>	<b>Description of discharge</b>	<b>Overflow setting l/s</b>	<b>Maximum size of solid matter</b>	<b>Screen aperture size</b>	<b>Minimum screen capacity flow l/s</b>	<b>Minimum storage capacity m<sup>3</sup> (off-line)</b>
A3 Settled storm sewage via Settled Storm Outfall (Outlet 3)	Settled storm sewage	12,400	No greater than 6 mm in more than 2 dimensions	6 mm	The screen shall be designed to cope with all flows up to and including the 1 in 5 year storm return period, as a minimum	127,264

<b>Effluent(s) and discharge point(s)</b>	<b>Monitoring type</b>	<b>Monitoring point NGR</b>	<b>Monitoring point reference</b>
A1 Secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 1)	UWWTR influent sampling	SP 16189 92360	UWWTR Crude Sampling Point Monitoring point to be appropriately labelled.
	UWWTR effluent sampling	SP 17161 91945	UWWTR Final Effluent Sampling Point OSM Sampling Point Monitoring point to be appropriately labelled.
	Effluent sampling	SP 17161 91945	UWWTR Final Effluent Sampling Point OSM Sampling Point Monitoring point to be appropriately labelled.
	MCERTS flow monitoring	SP 16187 92359	MCERTS Flow Meters (2) Monitoring point to be appropriately labelled.



<b>Table S3.4 Monitoring points</b>			
<b>Effluent(s) and discharge point(s)</b>	<b>Monitoring type</b>	<b>Monitoring point NGR</b>	<b>Monitoring point reference</b>
A2 Secondary treated sewage effluent with nutrient removal via Final Effluent Outfall (Outlet 2)	UWWTR influent sampling	SP 16189 92360	UWWTR Crude Sampling Point Monitoring point to be appropriately labelled.
	UWWTR effluent sampling	SP 17161 91945	UWWTR Final Effluent Sampling Point OSM Sampling Point Monitoring point to be appropriately labelled.
	Effluent sampling	SP 17161 91945	UWWTR Final Effluent Sampling Point OSM Sampling Point Monitoring point to be appropriately labelled.
	MCERTS flow monitoring	SP 16187 92359	MCERTS Flow Meters (2) Monitoring point to be appropriately labelled.
A3 Settled storm sewage via Settled Storm Outfall (Outlet 3)	Effluent sampling	SP 16276 91757	Settled Storm Sampling Point Monitoring point to be appropriately labelled.
	Event duration monitoring	SP 16153 91956	Event Duration Monitor (Settled Storm) Monitoring point to be appropriately labelled.

# Schedule 3A - Look up table

## 95 Percentile Look up table

Look up table	
Number of samples taken in any period of 12 months	Maximum number of samples permitted to exceed limit for given parameter
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5
54-67	6
68-81	7
82-95	8
96-110	9
111-125	10
126-140	11
141-155	12
156-171	13
172-187	14
188-203	15
204-219	16
220-235	17
236-251	18
252-268	19
269-284	20
285-300	21
301-317	22
318-334	23
335-350	24
351-365	25

## Schedule 3B - OSM tier 3 sampling frequency

Parameter	'Normal frequency' of samples per year	Reduced Sampling frequency after 12 consecutive months of numeric permit compliance, samples per year or pro rata over the remainder of a year	On numeric limit failure return to normal frequency as soon as reasonably practicable, samples per 12 months	Out of hours samples
Sanitary	24	12	24	For 24 samples 2 out of hours samples per annum
Non sanitary	12	12	12	For 12 samples 1 out of hours sample per annum

## Schedule 3C – Urban Waste Water Treatment Regulations sampling frequency

Population equivalent	Samples per year	Reduced sampling frequency after a year without an UWWTR exceedance or failure, samples per year	Following an UWWTR exceedance or failure return to the higher frequency in the year that follows, samples per year
2,000 to 9,999	12	4	12
10,000 to 49,999	12	N/A	N/A
50,000 or over	24	N/A	N/A

# Schedule 3D – Rolling 12 month mean assessment methodology and t-values

## Rolling 12 month mean compliance assessment method for site specific dissolved zinc as Zn and dissolved nickel as Ni limits (not UWWTR or phosphorus)

Calculate the mean and standard deviation for 12 months of data and then calculate the 90% confidence interval around the mean.

Lower confidence interval = mean – (t x standard error of mean).

Where:

- t is derived from the values of t table for n-1 degrees of freedom, where n is the number of samples
- the standard error of the mean is the standard deviation of the dataset  $\div \sqrt{n}$ .

If the lower bound confidence interval exceeds the permit limit, then we are 95% confident that the limit has been exceeded and a failure is recorded\*.

\*In some circumstances, an unusually high result may lead to a wide confidence interval because the approach assumes the data has a normal distribution (bell-shaped). This may mean that with the unusually high result included, the test does not show that the rolling 12 month mean limit was breached with more than 95% confidence, however if, with the high result excluded, the lower bound confidence interval exceeds the permit limit, then we are 95% confident that the limit has been exceeded and a failure is recorded.

<b>Values of t</b>	
<b>Degrees of freedom</b>	<b>t for 90% confidence interval</b>
2	2.920
3	2.353
4	2.132
5	2.015
6	1.943
7	1.895
8	1.860
9	1.833
10	1.813
11	1.796
12	1.782
13	1.771
14	1.761
15	1.753
16	1.746
17	1.740
18	1.734
19	1.729
20	1.725
25	1.708
30	1.697
35	1.690
40	1.684
50	1.676
60	1.671
70	1.667
80	1.664
90	1.662
100	1.660
1,000	1.646

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Monitoring point reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Dry Weather Flow (daily flows total)	MCERTS Flow Meters (2)	Annually Report to be submitted within 2 months of the end of the calendar year	1 <sup>st</sup> January
15-minute flow	MCERTS Flow Meters (2)	Reports to be provided to the Environment Agency upon request  Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
UWWTR - ATU-BOD as O <sub>2</sub> , COD as O <sub>2</sub> , total phosphorus as P	UWWTR Crude Sampling Point and UWWTR Final Effluent Sampling Point OSM Sampling Point	Monthly Report to be submitted within 28 days	1 <sup>st</sup> of month
Operator Self Monitoring - ATU-BOD as O <sub>2</sub> , ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C), total iron as Fe, dissolved zinc as Zn, dissolved nickel as Ni, antimony as Sb, arsenic as As, cadmium as Cd, Chloroform as CHCl <sub>3</sub> , Trichloroethylene as C <sub>2</sub> HCl <sub>3</sub>	UWWTR Final Effluent Sampling Point OSM Sampling Point	Quarterly Report to be submitted within 28 days	1 <sup>st</sup> of month
Operator Self Monitoring summary report	UWWTR Final Effluent Sampling Point OSM Sampling Point	Annually Report to be submitted within 2 months of the end of the calendar year	1 <sup>st</sup> January

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Monitoring point reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Settled storm sewage discharge start and end times	Event Duration Monitor (Settled Storm)	Reports to be provided to the Environment Agency upon request Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
Settled storm sewage discharge start and end times	Event Duration Monitor (Settled Storm)	Annually Report to be submitted within 2 months	1 <sup>st</sup> January
Settled storm sewage discharge event duration monitoring status (operational / not operational)	Event Duration Monitor (Settled Storm)	Annually Report to be submitted within 2 months	1 <sup>st</sup> January

<b>Table S4.2 Reporting forms</b>	
<b>Parameter</b>	<b>Reporting format</b>
Dry Weather Flow (daily flows total)	WISKI electronic format specified by the Environment Agency
15-minute flow	WISKI electronic format specified by the Environment Agency
UWWTR – ATU-BOD as O <sub>2</sub> , COD as O <sub>2</sub> , total phosphorus as P	Electronic format specified by the Environment Agency
OSM - ATU-BOD as O <sub>2</sub> , ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C), total iron as Fe, dissolved zinc as Zn, dissolved nickel as Ni, antimony as Sb, arsenic as As, cadmium as Cd, Chloroform as CHCl <sub>3</sub> , Trichloroethylene as C <sub>2</sub> HCl <sub>3</sub>	Quarterly - Electronic format specified by the Environment Agency
Operator Self Monitoring summary report	Annually - Summary report of compliance with the monitoring programme specified in table S3.1 and schedule 3B in a format specified by the Environment Agency
Settled storm sewage discharge start and end times	Form as agreed in writing by the Environment Agency
Settled storm sewage discharge start and end times	Annual summary report or other form as agreed in writing by the Environment Agency Number of and total duration of counted spills for all spills.

<b>Table S4.2 Reporting forms</b>	
<b>Parameter</b>	<b>Reporting format</b>
Settled storm sewage discharge event duration monitoring status (operational / not operational)	Annual summary report or other form as agreed in writing by the Environment Agency Percentage of time in the reporting period that the event duration monitoring equipment was operational.



## Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection unless otherwise agreed in writing by the Environment Agency</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released/type or nature of sewage released	
Best estimate of the quantity or rate of release of substances and/or duration of discharge	
Best estimate of the environmental impact of the discharge	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit specified in schedule 3 table S3.1 (including individual exceedances of limits which are covered by condition 3.1.2)</b>	
<b>The information specified below is to be notified to the Environment Agency as soon as reasonably practicable following detection.</b>	
Monitoring point reference/ source	
Self monitoring regime (where relevant)	e.g. OSM/UWWTR
Type of failure	e.g. LUT failure/LUT exceedance/upper tier/rolling 12 month mean/ other
Date of sample/event	
Parameter	
Result and units	
Limit and units	

**Part B – to be submitted as soon as reasonably practicable unless otherwise agreed in writing by the Environment Agency**

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident/breach/exceedance	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“abnormal operating conditions” include but are not limited to, the circumstances described in Regulation 40(1) of, or paragraph 6(5) of Schedule 21 to, the Environmental Permitting Regulations 2016 (illegal discharge to sewer), unusual weather, or during a defined period where the permit authorising the permitted activity has been varied for reasons such as capital works construction.

“accident” means an accident that may result in pollution.

“annually” means once every year.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

For the activities A1 and A2 referenced in schedule 1, table S1.1 “appropriate measures” for the purposes of the emission of substances not controlled by emission limits condition (condition 3.2.1) do not require the operator to undertake treatment to a level beyond that specified in schedule 1 table S1.1, or to carry out routine monitoring for substances not controlled by emission limits.

“ATU-BOD as O<sub>2</sub>” means the biochemical oxygen demand (measured after 5 days at 20°C with nitrification suppressed by the addition of allylthiourea).

“COD as O<sub>2</sub>” means the chemical oxygen demand (measured using the standard dichromate procedure).

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the permitted activities, which are not controlled by an emission limit.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“minimum screen capacity flow” means the minimum flow passed through the screens to the outfall when the screen bypass operates.

“monitoring frequency” as used in Table S3.1 in the context of Event Duration Monitoring is the temporal interval at which a change of state between no discharge and discharge is to be detected.

“overflow” for the purposes of schedule 7, means any weir or orifice or other means via which flow in excess of its overflow setting is diverted from the continuation flow when it is caused by rainfall and or snowmelt.

“overflow setting” means the minimum flow passed forward to the continuation flow when the overflow operates.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“sanitary parameters for OSM sampling” means ATU-BOD as O<sub>2</sub>, Ammoniacal nitrogen (expressed as N), Suspended solids (measured after drying at 105°C) and COD as O<sub>2</sub>.

“significant pollution” means a category 1 or category 2 incident indicated by the Common Incident Classification Scheme (CICS).

“spill” one or more overflow events within a period of 12 hours or less will be considered to be one spill, one or more overflow events extending over a period of greater than 12 hours up to 36 hours will be considered to be 2 spills. Each subsequent 24 hour duration counts as 1 additional spill and the whole of the 24 hour block is included.

“unusual weather conditions” includes, but is not limited to:

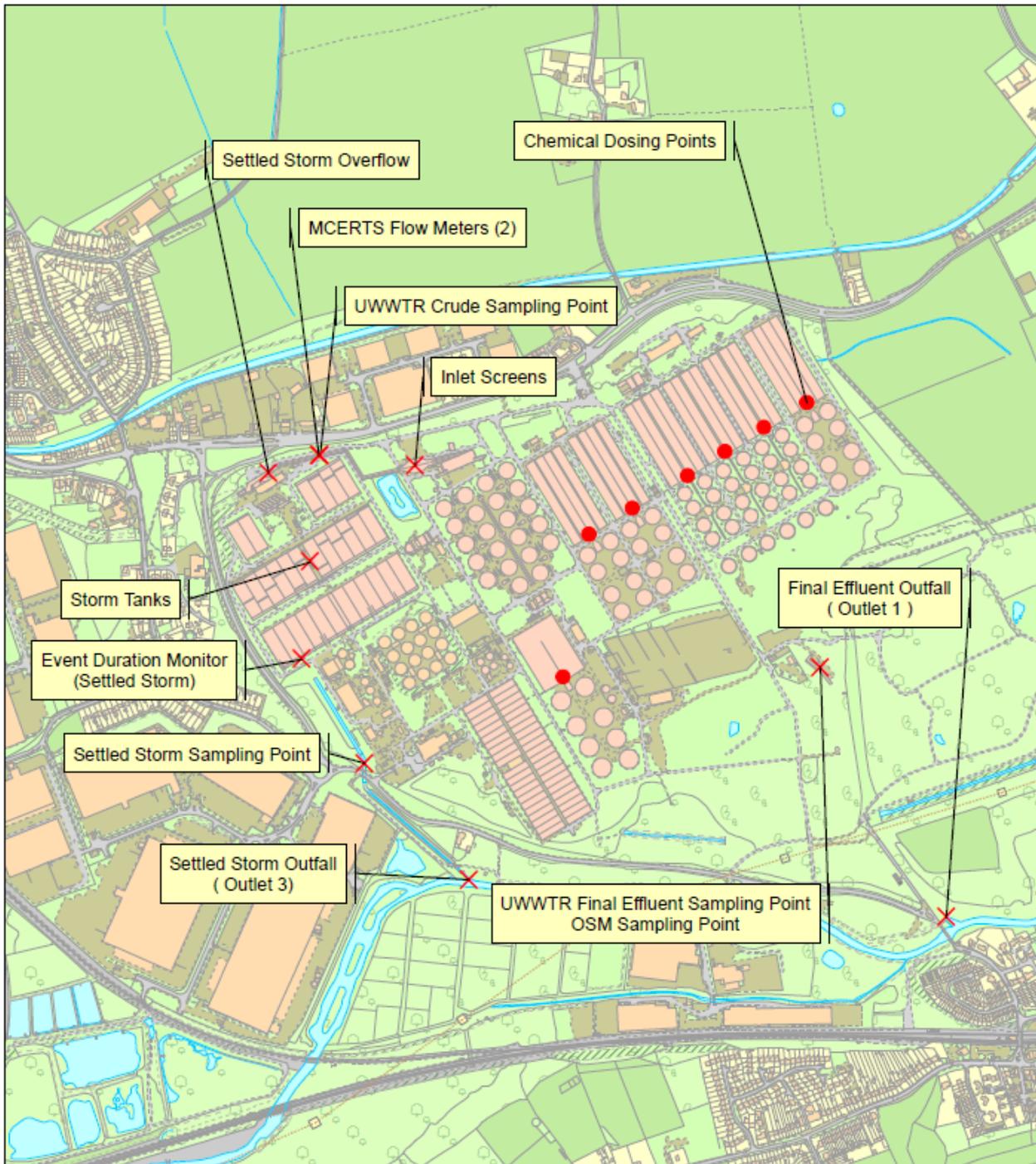
- low ambient temperatures, or the freezing of mechanical equipment in the works;
- significant snow deposits;
- tidal or fluvial flooding;

- weather conditions causing unforeseen loss of power supply to the sewage treatment that could not be ameliorated by the reasonable provision and operation of standby generation facilities.

“Urban Waste Water Treatment (England and Wales) Regulations 1994 (UWWTR)” means Urban Waste Water Treatment (England and Wales) Regulations 1994 SI 2841 and the words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“year” means calendar year ending 31 December.

# Schedule 7 – Site plans



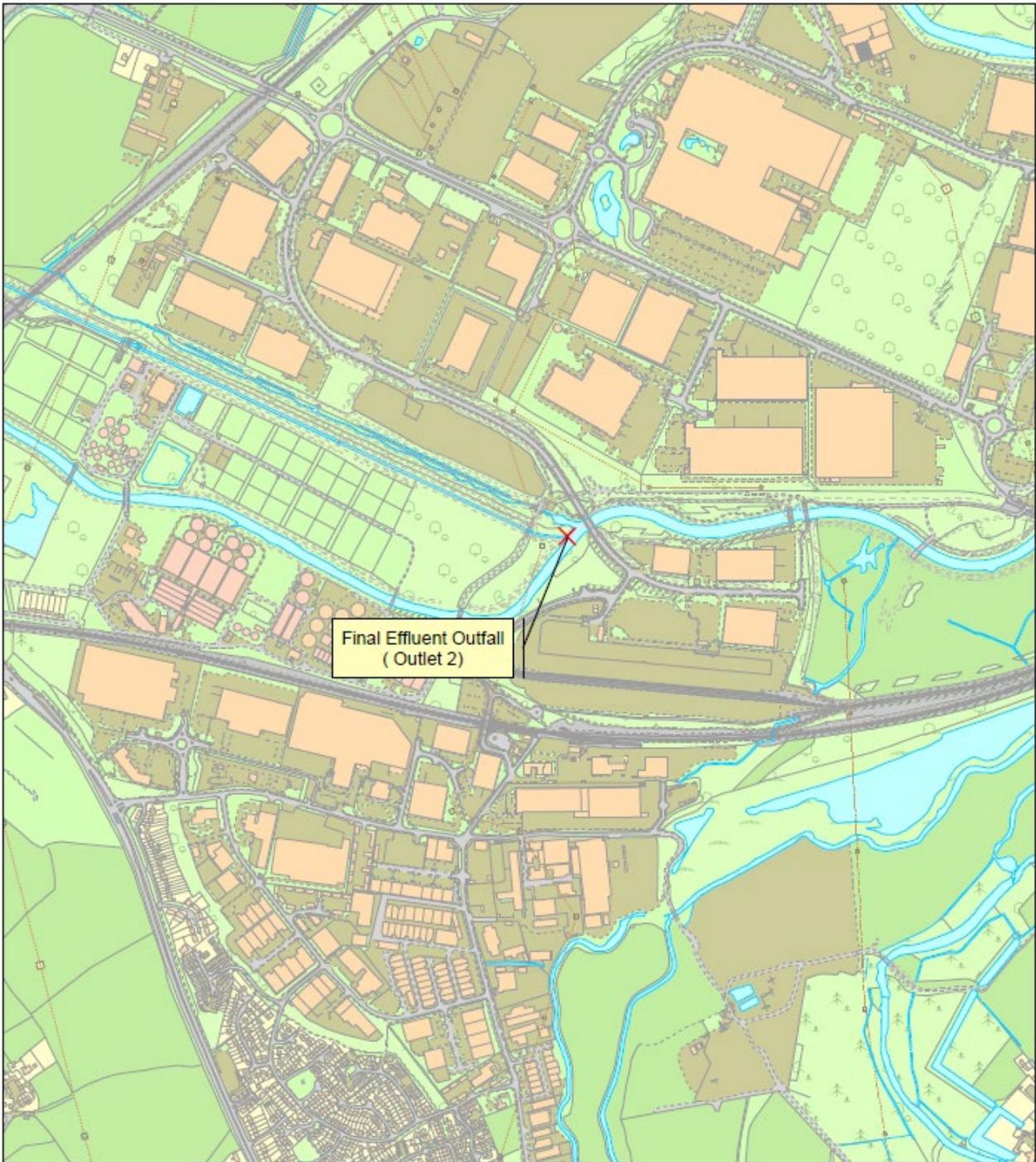
**Minworth STW - Site Plan 1**

June 2021

1:10,000

0 45 90 180 Meters

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 Ordnance Survey licence number 100018202



**Minworth STW - Site Plan 2**

June 2021

1:10,000

0 45 90 180 Meters  


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END OF PERMIT

## Environment Act 1995 c. 25

### s. 4 Principal aim and objectives of the Agency.



Law In Force

Version 3 of 3

1 April 2013 - Present

#### Subjects

Environment

#### Keywords

Environment Agency; Ministerial guidance; Objects and purposes; Sustainable development

#### 4.— Principal aim and objectives of the Agency.

(1) It shall be the principal aim of the Agency (subject to and in accordance with the provisions of this Act or any other enactment and taking into account any likely costs) in discharging its functions so to protect or enhance the environment, taken as a whole, as to make the contribution towards attaining the objective of achieving sustainable development mentioned in subsection (3) below.

(2) The [Secretary of State]<sup>1</sup> shall from time to time give guidance to the Agency with respect to objectives which [the Secretary of State considers]<sup>2</sup> it appropriate for the Agency to pursue in the discharge of its functions.

(3) The guidance given under subsection (2) above must include guidance with respect to the contribution which, having regard to the Agency's responsibilities and resources, the [Secretary of State considers]<sup>3</sup> it appropriate for the Agency to make, by the discharge of its functions, towards attaining the objective of achieving sustainable development.

(4) In discharging its functions, the Agency shall have regard to guidance given under this section.

(5) [ The power to give guidance to the Agency under this section shall only be exercisable after consultation with—

(a) the Agency,

(b) Natural England, and

(c) such other persons as the [Secretary of State considers]<sup>3</sup> it appropriate to consult in relation to the guidance in question.

] <sup>4</sup>

(6) A draft of any guidance proposed to be given under this section shall be laid before each House of Parliament and the guidance shall not be given until after the period of 40 days beginning with the day on which the draft was so laid or, if the draft is laid on different days, the later of the two days.

(7) If, within the period mentioned in subsection (6) above, either House resolves that the guidance, the draft of which was laid before it, should not be given, the [Secretary of State]<sup>5</sup> shall not give that guidance.

(8) In reckoning any period of 40 days for the purposes of subsection (6) or (7) above, no account shall be taken of any time during which Parliament is dissolved or prorogued or during which both Houses are adjourned for more than four days.

(9) The [Secretary of State]<sup>6</sup> shall arrange for any guidance given under this section to be published in such manner as [the Secretary of State considers]<sup>7</sup> appropriate.

## Notes

- 1 Word substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(2\)\(a\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
  - 2 Words substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(2\)\(b\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
  - 3 Words substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(3\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
  - 4 Words substituted by Natural Environment and Rural Communities Act 2006 c. 16 [Sch.11\(1\) para.140](#) (October 1, 2006)
  - 5 Word substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(4\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
  - 6 Word substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(5\)\(a\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
  - 7 Words substituted by Natural Resources Body for Wales (Functions) Order 2013/755 [Sch.2\(1\) para.362\(5\)\(b\)](#) (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)
- 

*Part I THE ENVIRONMENT AGENCY AND THE SCOTTISH ENVIRONMENT  
PROTECTION AGENCY > Chapter I THE ENVIRONMENT AGENCY > Transfer of  
functions, property etc. to the Agency > s. 4 Principal aim and objectives of the Agency.*

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## Deregulation Act 2015 c. 20

### s. 108 Exercise of regulatory functions: economic growth



Law In Force

Version 1 of 1

29 March 2017 - Present

#### Subjects

Administrative law; Economics

#### Keywords

Deregulation; Economic growth; Regulatory bodies

#### 108 Exercise of regulatory functions: economic growth

- (1) A person exercising a regulatory function to which this section applies must, in the exercise of the function, have regard to the desirability of promoting economic growth.
- (2) In performing the duty under subsection (1), the person must, in particular, consider the importance for the promotion of economic growth of exercising the regulatory function in a way which ensures that—
- (a) regulatory action is taken only when it is needed, and
  - (b) any action taken is proportionate.

---

*Exercise of regulatory functions > s. 108 Exercise of regulatory functions: economic growth*

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Department  
for Business  
Innovation & Skills

Better  
Regulation  
Delivery Office

## **Regulators' Code**

**April 2014**

## Foreword



In the Autumn Statement 2012 Government announced that it would introduce a package of measures to improve the way regulation is delivered at the frontline such as the Focus on Enforcement review of appeals, the proposed Growth Duty for non-economic regulators and the Accountability for Regulator Impact measure.

This Government is committed to reducing regulatory burdens and supporting compliant business growth through the development of an open and constructive relationship between regulators and those they regulate. The Regulators' Code provides a flexible, principles based framework for regulatory delivery that supports and enables regulators to design their service and enforcement policies in a manner that best suits the needs of businesses and other regulated entities.

Our expectation is that by clarifying the provisions contained in the previous Regulators' Compliance Code, in a shorter and accessible format, regulators and those they regulate will have a clear understanding of the services that can be expected and will feel able to challenge if these are not being fulfilled.

Regulators within scope of the Regulators' Code are diverse but they share a common primary purpose – to regulate for the protection of the vulnerable, the environment, social or other objective. This Code does not detract from these core purposes but seeks to promote proportionate, consistent and targeted regulatory activity through the development of transparent and effective dialogue and understanding between regulators and those they regulate.

I believe the Regulators' Code will support a positive shift in how regulation is delivered by setting clear expectations and promising open dialogue. Ultimately this will give businesses greater confidence to invest and grow.

A handwritten signature in black ink that reads "Michael Fallon". The signature is written in a cursive style with a horizontal line underneath the name.

Michael Fallon  
Minister of State for Business and Enterprise  
Department for Business, Innovation and Skills

## Regulators' Code

This Code was laid before Parliament in accordance with section 23 of the Legislative and Regulatory Reform Act 2006 ("the Act"). Regulators whose functions are specified by order under section 24(2) of the Act **must** have regard to the Code when developing policies and operational procedures that guide their regulatory activities. Regulators must equally have regard to the Code when setting standards or giving guidance which will guide the regulatory activities of other regulators. If a regulator concludes, on the basis of material evidence, that a specific provision of the Code is either not applicable or is outweighed by another relevant consideration, the regulator is not bound to follow that provision, but should record that decision and the reasons for it.

### **1. Regulators should carry out their activities in a way that supports those they regulate to comply and grow**

1.1 Regulators should avoid imposing unnecessary regulatory burdens through their regulatory activities<sup>1</sup> and should assess whether similar social, environmental and economic outcomes could be achieved by less burdensome means. Regulators should choose proportionate approaches to those they regulate, based on relevant factors including, for example, business size and capacity.

1.2 When designing and reviewing policies, operational procedures and practices, regulators should consider how they might support or enable economic growth for compliant businesses and other regulated entities<sup>2</sup>, for example, by considering how they can best:

- understand and minimise negative economic impacts of their regulatory activities;
- minimising the costs of compliance for those they regulate;
- improve confidence in compliance for those they regulate, by providing greater certainty; and
- encourage and promote compliance.

1.3 Regulators should ensure that their officers have the necessary knowledge and skills to support those they regulate, including having an understanding of those they regulate that enables them to choose proportionate and effective approaches.

1.4 Regulators should ensure that their officers understand the statutory principles of good regulation<sup>3</sup> and of this Code, and how the regulator delivers its activities in accordance with them.

### **2. Regulators should provide simple and straightforward ways to engage with those they regulate and hear their views**

2.1 Regulators should have mechanisms in place to engage those they regulate, citizens and others to offer views and contribute to the development of their policies and service standards. Before changing policies, practices or service standards, regulators should consider the impact on business and engage with business representatives.

---

<sup>1</sup> The term 'regulatory activities' refers to the whole range of regulatory options and interventions available to regulators.

<sup>2</sup> The terms 'business or businesses' is used throughout this document to refer to businesses and other regulated entities.

<sup>3</sup> The statutory principles of good regulation can be viewed in Part 2 (21) on page 12: [http://www.legislation.gov.uk/ukpga/2006/51/pdfs/ukpga\\_20060051\\_en.pdf](http://www.legislation.gov.uk/ukpga/2006/51/pdfs/ukpga_20060051_en.pdf).

- 2.2 In responding to non-compliance that they identify, regulators should clearly explain what the non-compliant item or activity is, the advice being given, actions required or decisions taken, and the reasons for these. Regulators should provide an opportunity for dialogue in relation to the advice, requirements or decisions, with a view to ensuring that they are acting in a way that is proportionate and consistent.

This paragraph does not apply where the regulator can demonstrate that immediate enforcement action is required to prevent or respond to a serious breach or where providing such an opportunity would be likely to defeat the purpose of the proposed enforcement action.

- 2.3 Regulators should provide an impartial and clearly explained route to appeal against a regulatory decision or a failure to act in accordance with this Code. Individual officers of the regulator who took the decision or action against which the appeal is being made should not be involved in considering the appeal. This route to appeal should be publicised to those who are regulated.
- 2.4 Regulators should provide a timely explanation in writing of any right to representation or right to appeal. This explanation should be in plain language and include practical information on the process involved.
- 2.5 Regulators should make available to those they regulate, clearly explained complaints procedures, allowing them to easily make a complaint about the conduct of the regulator.
- 2.6 Regulators should have a range of mechanisms to enable and regularly invite, receive and take on board customer feedback, including, for example, through customer satisfaction surveys of those they regulate<sup>4</sup>.

### **3. Regulators should base their regulatory activities on risk**

- 3.1 Regulators should take an evidence based approach to determining the priority risks in their area of responsibility, and should allocate resources where they would be most effective in addressing those priority risks.
- 3.2 Regulators should consider risk at every stage of their decision-making processes, including choosing the most appropriate type of intervention or way of working with those regulated; targeting checks on compliance; and when taking enforcement action.
- 3.3 Regulators designing a risk assessment framework<sup>5</sup>, for their own use or for use by others, should have mechanisms in place to consult on the design with those affected, and to review it regularly.
- 3.4 Regulators, in making their assessment of risk, should recognise the compliance record of those they regulate, including using earned recognition approaches and should consider all available and relevant data on compliance, including evidence of relevant external verification.
- 3.5 Regulators should review the effectiveness of their chosen regulatory activities in delivering the desired outcomes and make any necessary adjustments accordingly.

---

<sup>4</sup> The Government will discuss with national regulators a common approach to surveys to support benchmarking of their performance.

<sup>5</sup> The term 'risk assessment framework' encompasses any model, scheme, methodology or risk rating approach that is used to inform risk-based targeting of regulatory activities in relation to individual businesses or other regulated entities.

**4. Regulators should share information about compliance and risk**

- 4.1 Regulators should collectively follow the principle of “collect once, use many times” when requesting information from those they regulate.
- 4.2 When the law allows, regulators should agree secure mechanisms to share information with each other about businesses and other bodies they regulate, to help target resources and activities and minimise duplication.

**5. Regulators should ensure clear information, guidance and advice is available to help those they regulate meet their responsibilities to comply**

- 5.1 Regulators should provide advice and guidance that is focused on assisting those they regulate to understand and meet their responsibilities. When providing advice and guidance, legal requirements should be distinguished from suggested good practice and the impact of the advice or guidance should be considered so that it does not impose unnecessary burdens in itself.
- 5.2 Regulators should publish guidance, and information in a clear, accessible, concise format, using media appropriate to the target audience and written in plain language for the audience.
- 5.3 Regulators should have mechanisms in place to consult those they regulate in relation to the guidance they produce to ensure that it meets their needs.
- 5.4 Regulators should seek to create an environment in which those they regulate have confidence in the advice they receive and feel able to seek advice without fear of triggering enforcement action.
- 5.5 In responding to requests for advice, a regulator's primary concerns should be to provide the advice necessary to support compliance, and to ensure that the advice can be relied on.
- 5.6 Regulators should have mechanisms to work collaboratively to assist those regulated by more than one regulator. Regulators should consider advice provided by other regulators and, where there is disagreement about the advice provided, this should be discussed with the other regulator to reach agreement.

**6. Regulators should ensure that their approach to their regulatory activities is transparent**

- 6.1 Regulators should publish a set of clear service standards, setting out what those they regulate should expect from them.
- 6.2 Regulators' published service standards should include clear information on:
  - a) how they communicate with those they regulate and how they can be contacted;
  - b) their approach to providing information, guidance and advice;
  - c) their approach to checks on compliance<sup>6</sup>, including details of the risk assessment framework used to target those checks as well as protocols for their conduct, clearly setting out what those they regulate should expect;

---

<sup>6</sup> Including inspections, audit, monitoring and sampling visits, and test purchases.

- d) their enforcement policy, explaining how they respond to non-compliance;
  - e) their fees and charges, if any. This information should clearly explain the basis on which these are calculated, and should include an explanation of whether compliance will affect fees and charges; and
  - f) how to comment or complain about the service provided and routes to appeal.
- 6.3 Information published to meet the provisions of this Code should be easily accessible, including being available at a single point<sup>7</sup> on the regulator's website that is clearly signposted, and it should be kept up to date.
- 6.4 Regulators should have mechanisms in place to ensure that their officers act in accordance with their published service standards, including their enforcement policy.
- 6.5 Regulators should publish, on a regular basis, details of their performance against their service standards, including feedback received from those they regulate, such as customer satisfaction surveys, and data relating to complaints about them and appeals against their decisions.

---

<sup>7</sup> This requirement may be satisfied by providing a single web page that includes links to information published elsewhere.

## Monitoring the effectiveness of the Regulators' Code

The Government is committed to making sure the Regulators' Code is effective. To make sure that the Code is being used effectively, we want businesses, regulated bodies and citizens to challenge regulators who they believe are not acting in accordance with their published policies and standards. It is in the wider public interest that regulators are transparent and proportionate in their approaches to regulation.

The Government will monitor published policies and standards of regulators subject to the Regulators' Code, and will challenge regulators where there is evidence that policies and standards are not in line with the Code or are not followed.

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**URN: BRDO/14/705**





## Summary of responses to our 2013 public consultation "H1 Environmental Risk Assessment"

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July 2015

We are the Environment Agency. We protect and improve the environment and make it **a better place** for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

**Published by:**

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E: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk).

# Foreword

This document summarises the Environment Agency's response to issues raised through our public consultation entitled "H1 Environmental Risk Assessment". The consultation ran on the Environment Agency's consultation webpage from 31st October to 24th December 2013.

The Environment Agency uses the H1 system in support of its regulatory activities. In particular decisions made in consideration of applications for bespoke permits made under the Environmental Permitting (England and Wales) (Amendment) Regulations (EPR) 2013. H1 is structured with an Overview document supported by a series of technical annexes, each of which provides guidance on risk assessments which relate to particular activities described within the regulations. The Overview describes our approach to risk assessment and the technical annexes present guidance on how stage two of the four stage process should be carried out.

The purpose of this consultation was to seek the public view on changes we propose to seven of the current eleven annexes. If implemented, our proposals will reduce the number of annexes from eleven down to nine. And modifications to the H1 software tool will enable the user to carry out the new screening process for the assessment of discharges to surface waters in support of their permit application.

Within the consultation document we included a series of questions that reflected the changes we are proposing to make. This produced 21 responses and over 300 queries. Responses came from fellow regulators, from regulated industry, from water companies, from trade associations, from health professionals and from environmental consultants.

Once our response to this consultation is published we will follow that up with publication of the annexes and the H1 software tool. The documents will appear on the Gov.UK website and our H1 software tool will be available via our National Customer Contact Centre.

Since compiling this document the Government has introduced its Smarter Guidance and Data project which seeks to simplify environmental guidance and data reporting requirements. As a consequence of this project we have decided to incorporate the contents of our new annex A into a modified risk assessment overview document that will replace the current H1. This does not affect the responses we have given in relation to our original proposal included within the consultation.

# Executive summary

H1 is the Environment Agency's principal horizontal guidance note that cuts across all functions we regulate under the Environmental Permitting Regulations 2010, SI 675 as amended by the Environmental Permitting (England and Wales) (Amendment) Regulations (EPR) 2013, SI 390. H1 advises operators applying for a bespoke permit on the appropriate measures to use to manage health and environmental risks from the operation of their activity.

Launched in modular form in April 2010, H1 currently includes an Overview document supported by eleven technical annexes. The Overview document serves to guide readers only to the annexes that relate to their activities, thereby streamlining risk assessments undertaken in support of the permitting process. The main structural change resulting from this consultation was a proposal to reduce the number of technical annexes from eleven down to nine.

Changes to the various annex include:

- the introduction of a screening and modelling approach for the permitting of discharges containing hazardous pollutants across all EPR activities,
- the brigading of amenity and accident risks across all EPR activities into one annex,
- updating the ammonia screening tool for Intensive Farming,
- development of an Odour screening tool for point sources,
- changes to our cost benefit analysis to assist operators who wish to support a claim for derogation from the BAT Conclusions associated emission levels (AELs) within the Industrial Emissions Directive<sup>1</sup>.

The H1 software tool has been modified to include the new screening for hazardous pollutants. Outputs from the tool have also been linked to OPRA spreadsheets and input and output data can now be viewed in a spreadsheet and printed.

We considered that our proposal to introduce a new screening methodology for the assessment of discharges containing hazardous pollutants could result in additional costs to users of H1 annex D. To reflect government policy and our responsibilities under the 'Accountability for Regulatory Impact', we sought responses from anyone who felt they would incur a significant increasing or decreasing of the resource they would have to commit in carrying out these changes.

The consultation included eight questions, with some split into more than one part.

Whilst the thrust of the consultation was to seek responses in respect of the technical issues arising from these proposals, we were keen to learn how readers felt the consultation had operated in its electronic form and how it had been managed. This document is a summary of the consultation. It includes the questions we have posed, a summary of the comments we received and our responses to the issues raised.

---

<sup>1</sup> 2010/75/EU

# Acknowledgements

Environment Agency would like to thank all those who participated in this H1 public consultation. The name of their organisations or whom they represent is included in the Appendix.

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# Summary of responses to our "H1 Environmental Risk Assessment 2013"

## Background

Pollutant concentrations in the environment, released from activities listed within the Environmental Permitting Regulations 2010 (EPR) SI 675, as amended by the Environmental Permitting (England and Wales) (Amendment) Regulations (EPR) 2013 SI 390, are assessed against a series of environmental standards. By introducing a series of criteria, which screen out those pollutant concentrations which are a small portion of the relevant standard, the Environment Agency is able to focus its attention on the more polluting releases which carry the greater risk. The Environment Agency uses its H1 system to carry out that screening process.

The H1 system is structured with an Overview document supported by a series of technical annexes. The Overview document includes a four-stage risk assessment which requires the applicant to:

- identify risks from their activity,
- assess the risks and check that they are acceptable,
- justify appropriate measures to control the risks, if necessary, and then
- submit their assessment.

To enable the applicant to identify the risks from their activity a table of EPR activities and how they relate to the H1 annexes is included within Table one of the Overview document. The technical annexes enable the applicant to concentrate on the risks associated with their activity. And it is to seven of these annexes we proposed to make changes.

Changes to the various annex include:

- the introduction of a screening and modelling approach for hazardous pollutants across all EPR activities, annex D.
- the brigading of amenity and accident risks across all EPR activities into one annex, annex A.
- updating the ammonia screening tool for Intensive Farming, annex B.
- development of an Odour screening tool for point sources, annex F.
- changes to our cost benefit analysis to assist operators who wish to support a claim for derogation from the BAT Conclusions achievable emission limits (AELs) within the Industrial Emissions Directive<sup>2</sup>, annex K.
- removal from circulation of annex C and annex E.

A series of eight questions were posed regarding these changes and the responses collated. The content of each question and our response is given in the following sections of this report.

---

<sup>2</sup> 2010/75/EU

# 1. The Consultation Questions

Questions were assigned to the annexes we are proposing to change and these are listed below:

Q1. Combining annex A and annex C into one document.

Question 1a: Does the combined annex A and annex C work for you in terms of assessing the amenity and accident risks from your activity? If not, please tell us where improvements are needed.

Q2. Annex B – Intensive Farming.

Question 2a: Is the approach to ammonia assessment clearly explained? If not please explain where improvements should be made and why?

Question 2b: Is the new screening approach for small on-farm biomass boilers clearly explained? If not please explain where improvements should be made and why?

Q3. The Environment Agency's planned approach to implementing the statutory requirements of the Water Framework Directive (annex D package of documents).

Question 3a: Please tell us if in undertaking this new screening approach for hazardous pollutants in annex D1 you believe you will incur any significantly increased or decreased costs.

Question 3b: Do you have any comments on the additional paragraph in annex D1 in the section on estuarine and coastal waters entitled "Screening Limitations"?

Question 3c: Do you have any comments on the method for calculating the PEC in annex D1?

Question 3d: Do you have comments on the use of the mixing zones approach for calculation of the process contribution for discharges from installations and waste sites to estuarine and coastal waters (salt water)?

Question 3e: Does the worked example of the new screening calculations and modelling methodology (in annex D1, appendix A) explain the process clearly? If not how could it be improved?

Q4. Annex F - Odour dispersion factors.

Question 4a: Do you think the screening criterion in annex F is appropriate for odour assessments or could you justify an alternative?

Question 4b: Would you like to see Odour Dispersion Factors provided for other aspects of EPR regulation in addition to point sources? If so, please explain why.

Q5. The revised annex K (2013).

Question 5a: Does the revised document still work for what we previously would have called 'BAT assessments'? If not, please tell us where improvements are needed.

Question 5b: Do you support the view that the life span of some major plant items may be greater than those in Table five? If so, please provide any evidence of plant operating for longer periods than given in this table?



Q6. Changes to the H1 software tool.

Question 6a: Do you support these changes? Are there other areas where you think improvements should be made?

Question 6b: Looking at the H1 software tool 'Page help' and 'Box help' are there any areas where you think the support and guidance could be improved?

Q7. The scope of the Environmental Permitting Regulations (EPR) in relation to the making of bespoke permit applications to the Environment Agency.

Question 7: In addition to these changes are there any other areas of EPR where you feel H1 should be modified to either simplify the making of bespoke applications or reduce the burden on applicants when compiling their bespoke application?

Q8: Please provide any other comments.

Responses to each question are presented in the following section to this report.

## 2. Responses to questions

This section summarises the responses to the questions in the consultation.

### 2.1 Combining Annex A and Annex C into one document

**Question 1a:** Does the combined annex A and annex C work for you in terms of assessing the amenity and accident risks from your activity? If not, please tell us where improvements are needed.

#### Summary

While the majority of respondents supported the merging of annex A with annex C and the simplifications it offered, some respondents were not happy. Reference to sewage treatment works within the body of the text left some operators of water companies feeling we were trying to apply the need for the assessment of accident risks to sites with activities defined under the Urban Waste Water Treatment Directive. However one multi-installation site felt the level of detail presented within the merged annex A was unmanageable for a large industrial site with a company-wide management system and asked how this could be implemented with multiple levels of governance.

1.1 Health professionals found the new annex A straightforward and that it detailed the key elements to be considered by an applicant. They recommended we satisfy ourselves that existing accident risks are appropriate and that further hazards should be added.

**Our response:** We welcome this support and will add additional hazards to the examples at the back of the new annex A.

1.2 A consultant thought the combining of annex A and C served to avoid duplication of information but the new annex A lacked examples of hazards that previously were associated in annex C with regulated surface water and groundwater discharges.

**Our response:** We acknowledge this observation and will make amendments to the hazards displayed at the back of the new annex A.

1.3 A One water company welcomed the merger of annex A and annex C. They recognised how the merger simplified the process of aligning accident risk with potential receptor to ensure the appropriate control or mitigation measure was available. Since the thought process for the two annex is similar, merging them makes the process simpler to follow.

**Our response:** It is clear that some water company operators welcome the simplification in the assessment of accident risk this merger provides to regulated sites.

1.4 Another water company thought the merger made sense, particularly where they have installations or waste operations on sewage treatment works where there are direct pathways to controlled water-bodies.

**Our response:** A qualified vote in favour of the proposed merger of annex A and C.

1.5 Two remaining water companies felt the merger had transposed the purpose of annex C from activities of sewage discharges and discharges to groundwater into a combined annex where reference was also made to sewage treatment works.

**Our response:** We acknowledge the concerns this has raised and we will clarify the position in the new annex A when it is published.

1.6 One multiple facility installation, where the assessment of accident risks is governed by a company-wide management system, found that when following table five in annex A and table two in annex C the potential number of accident scenarios too large and difficult to govern. They asked how this would be better implemented on a larger company level, with multiple levels of governance.

**Our response:** We would expect each permitted operator to hold and to implement an environment management system which is proportionate to the on-site activities and the risk they pose to the environment. This could be in the form of a simple check list to a fully certified ISO 14001 system. The revised annex A is designed to cover all EPR activities, but the variety of regulated activities means we can guide operators without specifically setting out how they should manage their own systems.

1.7 It was felt by a water company that amenity and accident risks were not distinguished from each other in the tables of examples at the back of annex A.

**Our response:** Amenities are issues such as odour, noise, fugitive emissions and visible plumes. Within annex A tables one to four give examples for each of these risks. Accident risks are separate in Table five.

1.8 It was not clear to one Water company how the accidents represented in annex A are those that account for the changing climate.

**Our response:** Within the list above Table five we have included two examples to represent risks associated with the changing climate. These are flooding of all types and extreme weather events such as drought, heat waves or strong winds.

1.9 A water company noted that flooding and extreme weather events has been added to the list of accident risks on page 16 of annex A and accepted that a degree of resilience was important. However they considered that combining resilience with some of the original accidents on the list was unbalanced and represented a combining of unpredictable and predictable factors. These should be considered separately to enable a measured and appropriate response in each case.

**Our response:** The additional accident risks were considered necessary following recent flooding events which had the potential to seriously disrupt essential operations such as water pumping stations. Within our changing climate such occurrences can now be considered as a predictable event.

1.10 An industrialist felt on large scale installations that only hazards with the potential to create off-site risks should be considered.

**Our response:** The majority of specific permitting standards and other related requirements for environmental and human health protection come from Directives. The Environmental Permitting Regulations ensure those Directive and national policy requirements that can be delivered through a permitting and compliance system are delivered by the Regime. Within the directive on ambient air quality<sup>3</sup> and cleaner air for Europe, ambient air means outdoor air in the troposphere, excluding workplaces as

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<sup>3</sup> 2008/50/EC

defined by Directive 89/654/EEC (3) where provisions concerning health and safety at work apply and to which members of the public do not have regular access. Hence it is appropriate that operators assess the risks associated with their activity which have the potential to affect off-site receptors.

1.11 An opinion expressed by an industrialist was that it is an onerous request to expect operators to list all potential sources of fugitive emissions and to set control measures for each.

**Our response:** We would expect all operator's of installations to have an understanding of their sources of fugitive emissions and to manage them such that pollution that may have an effect off-site or to groundwater is minimised.

1.12 An industrialist suggested that groundwater should be listed as a receptor in Table 4 of annex A and currently it is not.

**Our response:** We will amend Table four to include groundwater as a receptor.

1.13 Under the section of annex A "What are the chances of causing harm?" we refer to the need for a realistic assessment of the effectiveness of the operator's risk management measures. We add that the realism of those measures should reflect our professional experience of how effective measures are. This prompted an industrialist to suggest that the experience of their staff in compiling risk assessments for their activities should be given similar weight to that of the regulator and that risk assessments should be realistic and not overly conservative.

**Our response:** This document is written for all activities which are permitted under EPR. The scale of the risk assessments the operator should consider in compiling their application should reflect the complexity of those activities. We would expect operators of major industrial sites to be fully conversant with these requirements, but operators of other sites may not be so and we aim to provide guidance to all operator's of EPR activities.

## 2.2 Annex B – Intensive Farming

**Question 2a:** Is the approach to ammonia assessment clearly explained? If not please explain where improvements should be made and why?

### Summary

Clarification on issues relating to the new text in annex B was sought by trade associations and conservationists and in the majority of cases we have amended the text.

2.1 A trade association and union representatives suggested that since there is often poor evidence of actual damage from ammonia emissions from the Intensive Agricultural sector, and the concept of critical levels and critical loads is more an indication of increased risk rather than an indication that damage will occur, they felt it was time to reassess the values used by us and published in the guidance. They referred specifically to an allowable process contribution (PC) of only 20 per cent of the critical level for SAC sites, 50 per cent for SSSI sites and 100 per cent for ancient woodland sites, describing these thresholds are arbitrary and too restrictive.

**Our response:** We apply different thresholds to the nature conservation sites, above which detailed modelling will be required as part of the application to assess the potential impacts of ammonia emissions. We use a hierarchical approach based on the level of designation. The screening thresholds are under review. Annex B will be updated if the thresholds change as result of this review.

2.2 The same trade association and union representatives suggested a review of current modelling guidance was required as they believed it was not working as it should and served to misinform permitting officers. Specifically, the validity of the two-stage approach which they suggested adds complexity and hence additional costs to operators. They suggested the application of spatially variable deposition velocities was not required for small to medium installations and that N deposition values, including plume depletion effects, could be calculated more simply by current models.

**Our response:** We consider the approach outlined in the guidance to be technically robust. We recommend the two-stage approach to allow the concentration dependency of the deposition velocity and the ammonia depletion of the plume to be taken into account. Only where stage one predictions exceed the relevant assessment thresholds do we recommend applying variable deposition velocities. The approach is based on the current understanding of ammonia deposition and best available information. We will review and revise the method in light of new information and the development of modelling techniques as they become available.

2.3 Union representatives asked that the array of acronyms used with 'designated sites' be explained.

**Our response:** Table seven within annex B will be amended, specifically to include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) or Ramsar sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Local Nature Reserves (LNRs), Local Wildlife Sites (LWS) and ancient woodland (AW)

2.4 A trade association stated that it is difficult evaluate the revised approach to ammonia assessment as the screening thresholds are still under review.

**Our response:** The current thresholds were set in 2007 and reflected best available evidence at that time. We are reviewing these thresholds in the light of recent evidence and we will discuss the findings with industry when it is complete. We will also update annex B if necessary within a revised version we hope to publish soon.

2.5 In the first paragraphs under the sections “What kind of assessment is required?” and “Assessment of emissions to air in relation to critical levels and critical loads” a trade association suggested it would be useful to mention the acidification effects of nitrogen deposition as well as the eutrophication effects, as nitrogen deposition is to be assessed against critical loads for both acid and nutrient nitrogen deposition.

**Our response:** We have amended the text in annex B to clarify this position.

2.6 A trade association observed that for consistency with the 2010 briefing note “Ammonia emissions from Intensive Pig and Poultry Farms – Clarification of the Environment Agency assessment process” the initial screening threshold using AST for the impacts of a single installation (Y per cent) should be 50 per cent rather than 100 per cent.

**Our response:** Due to increased confidence with our AST results we now screen up to Z per cent and only require modelling where the screening indicates the predicted PC (alone or in-combination) is greater than Z per cent. We will screen emissions at the pre-application stage. Any potential in-combination effects from existing nearby farms will be assessed as part of the screening. Only where the application farms' PC is predicted to exceed Y per cent and the total in-combination contribution exceeds Z per cent will detailed modelling be required.

2.7 Looking at screening thresholds a trade association suggested that “emissions” of ammonia should be replaced by “concentrations” of ammonia.

**Our response:** We have amended the text in annex B to make this change.

2.8 Under the section “Detailed assessment” a trade association thought the first bullet point should refer to Y per cent rather than Z per cent?

**Our response:** See our response to 2.6.

2.9 Under the section “Proposing ammonia emission reduction techniques” a trade association suggested that it is not clear what the “allowable thresholds” are for the results from detailed modelling. They asked are they Y per cent for individual installations and Z per cent for individual installations (as specified in our 2010 briefing note)?

**Our response:** We have amended annex B to explain that Z per cent is the allowable threshold.

2.10 A trade association asked why under the section “Proposing ammonia reduction techniques” and the “allowable thresholds” resulting from detailed modelling why is there no assessment of the sum of the process contribution (PC) plus background (PEC) against the critical level/load?

**Our response:** Your assessment and application should include ammonia reduction techniques to reduce the contribution to within the allowable threshold where:

- your modelling indicates the predicted process contribution (in combination with other nearby intensive livestock farms) plus background levels is greater than the relevant critical level or load;
- your modelling indicates the predicted process contribution (in combination with other nearby intensive livestock farms) is more than 20 per cent of the Critical Level/Load at a SAC, SPA or Ramsar, more than 50 per cent at a SSSI or more than 100 per cent at a NNR, LNR, ancient woodland or local wildlife site.

2.11 A trade association suggested that annex B Figure one is not consistent with the associated text. They asked is the pre-application discussion a staged approach, with further information requested if nature conservation sites are found within the distance screening criteria.

**Our response:** The pre-app screening is a staged approach. We have deleted the distance screening from the flowchart to simplify.

2.12 Reviewing Appendix one in annex B a trade association asked why is rainfall data required if wet deposition is not considered in the assessment?

**Our response:** We have amended the text by removing the reference to rainfall.

2.13 On annex B page 25 a trade association suggested that in the section 'What kind of assessment is required?' paragraph one "...main sources of ammonia (due to intensive farming?) in the atmosphere...?"

**Our response:** We propose to take no action as we believe the message is clear.

2.14 Following to the next section on annex B page 25 a trade association suggested that in the section 'What kind of assessment is required?' paragraph two - "...the annual amount of ammonia.." should say "...the annual amount of nitrogen..?"

**Our response:** We have amended the text to clarify this point.

2.15 Going further on annex B page 25 a trade association suggested that in the section 'What kind of assessment is required?' paragraph two - "...(in kilogrammes of nitrogen) after nitrogen we should insert "for eutrophication or kilograms of H+ equivalent for acidification"?"

**Our response:** We have amended the text to show the second is the critical load, which specifies the annual amount of ammonia that can be deposited (in kilogrammes of nitrogen for eutrophication and kilo equivalents per hectare and year for acidification).

2.16 On annex B page 26 a trade association suggested that in the section 'Assessment of emissions to air in relation to critical levels and loads' - after "nutrient nitrogen.." insert "and acidification"?

**Our response:** Agreed. We have amended the sentence to say 'The assessment process (summarised in Figure one) will help you identify the location of nearby nature conservation sites, assess the sensitivity of these sites to airborne ammonia concentration, nutrient nitrogen deposition and acidification.'

2.17 A trade association suggested that in annex B page 27 first bullet after "the housing type" insert "and corresponding animal places"?

**Our response:** Agreed. We have amended the sentence to say 'The most appropriate ammonia emission factors for the housing type and corresponding animal numbers'.

2.18 On annex B page 27 in the section Screening Overview a trade association suggested that in the first paragraph we replace "correct" with "collected"?

**Our response:** We feel no change is necessary.

2.19 In annex B appendix one second bullet a fellow regulator suggested that after "(kg(N)/ha/yr)" we should add "and keq/ha/yr"?

**Our response:** Agreed, text amended.

2.20 A fellow regulator asked in annex B appendix one fourth bullet - what does "technologies and techniques" relate to, site operation?

**Our response:** This refers to the site operation, type of housing, type of livestock, ventilation and abatement if applicable.

2.21 In annex B appendix one fifth bullet a fellow regulator asked why the requirement to model short term peaks when ammonia assessments are based on annual average emission factors.

**Our response:** We have considered this comment and deleted this bullet point from the revised version of annex B.

2.22 In annex B appendix one last bullet a fellow regulator suggested that after "measured data for the site" we add "at the emission point"?

**Our response:** We feel there is no need to make this change as with intensive farming it is more likely we will trial data to support the emission factor rather than require measuring at an emission point.

2.23 In annex B appendix one first paragraph after bullets a fellow regulator questioned whether guidance referred to is available via the Environment Agency's website?

**Our response:** This stand alone guidance has been incorporated into H1 annex B Appendix one.

2.24 A fellow regulator suggested that in annex B appendix one page 30 last paragraph we replace "..an adequate approximation.." with "acceptable".

**Our response:** Agreed. We have amended this text.

2.25 Going further a fellow regulator suggested that in annex B appendix one stage two page 33 last paragraph we supplement "ADMS 4.2" with "or later version".

**Our response:** Agreed. We have amended this text.

2.26 In annex B page 26 paragraph four a fellow regulator suggested we insert 'pages' after 'Site Relevant Critical Load tool'.

**Our response:** This is a style issue and we have not changed the text.



2.27 In annex B page 33 Appendix one stage one, step ii a fellow regulator suggested a formatting change of 'Vd' to 'V<sup>d</sup>' to be consistent with the explanation below the formulae.

**Our response:** Agreed, we have changed the font.

2.28 In annex B page 33 Appendix one stage one, step iv a fellow regulator asked are the thresholds referred to here the same as those in Table seven? If yes then refer to Table seven here?

**Our response:** If the predictions from Stage one indicates that the thresholds used in the assessment (Table seven) will be exceeded, then go to Stage two.

2.29 In annex B page 34 Table A1 a fellow regulator asked are the deposition velocities in columns three to six to be used for any vegetation?

**Our response:** The deposition velocities for concentrations above 10ug/m<sup>3</sup> can be used for both short and tall vegetation.

2.30 In annex B page 34 Table A1 a fellow regulator suggested it might be helpful to indicate that for these deposition velocities there is no distinction made for vegetation height as for 0.02-0.03m/s.

**Our response:** We have not received any feedback from modellers related to misinterpreting this section. Hence we conclude that no changes are necessary.

2.31 In annex B page 25 a fellow regulator asked would the assessment of nitrogen dioxide also include its contribution to acid deposition?

**Our response:** We have modified the text to include acidification.

2.32 A fellow regulator sought confirmation that in annex B page 25 it is nitrogen dioxide and not nitrogen oxide that is being assessed?

**Our response:** Yes we can confirm that nitrogen dioxide is being assessed. For deposition, we are interested in Nitrogen Dioxide and not Nitrogen Oxide.

2.33 Conservationists suggested that in annex B acid deposition & potential acidification effects are missing from "Assessment of emissions to air in relation to critical levels & loads".

**Our response:** We have amended the text to include reference to effects of acidification.

2.34 In annex B table one page five conservationists suggested this should refer to non-fugitive emissions to air.

**Our response:** Agreed, we have inserted Point Source Emissions into the table.

2.35 In annex B conservationists suggested it would be helpful to refer operators to Environment Agency/Natural England joint guidance on the planning-permitting interface (additional guidance for Intensive Farming).

**Our response:** This guidance is not approved or published so we cannot refer applicants to it.

2.36 In annex B page five 'How serious could the harm be?' conservationists suggested we add sensitive lichens & ammonia.

**Our response:** Agreed, we have amended the text.

2.37 In annex B page six paragraph three - "Only look for receptors near your site.." conservationists asked is there a table of distances you could refer to? Would an operator consider 5km for SSSI's & 10km for N2K sites as 'near'? Table seven, page 27 perhaps?

**Our response:** We believe no action is required as the introduction and distances are covered in the ammonia section. This introduction covers distances for noise and odour as well as ammonia.

2.38 In annex B page six paragraph six conservationists suggested that we need to show the locations of sensitive nature conservation sites too.

**Our response:** Agreed, we have amended the text.

2.39 In annex B page seven table two conservationists suggested that SAC's, SPA's, Ramsar are usually referred to as "International or European designated sites".

**Our response:** Agreed, we have amended the text.

2.40 In annex B page seven table two conservationists suggested we insert a link to information on SAC's, SPA's, Ramsar via:

<http://www.natureonthemap.naturalengland.org.uk/>

**Our response:** Agreed, we have inserted the link.

2.41 In annex B page 25 paragraph six conservationists asked what does "not all the sites listed are relevant to the Intensive Farming sector" mean?

**Our response:** The fact sheet covers all EPR sectors and therefore includes receptors such as listed buildings, built conservation areas and coastal areas that are not relevant to the Intensive Farming Sector.

2.42 In annex B page 25 paragraph seven, first sentence conservationists suggested we add slurry storage as well as manure.

**Our response:** Agreed, we have amended the text.

2.43 In annex B page 25 paragraph seven, second sentence conservationists advised that lower plants are 'often' the most sensitive species such as the orange Xanthoria which likes extra nitrogen.

**Our response:** Agreed, we have amended the text.

2.44 In annex B page 25 paragraph seven, final sentence conservationists suggested we replace 'variety' with 'diversity' and link to 'your excellent ammonia leaflet'?

**Our response:** Agreed, we have amended the text. We will consider inserting the link when the amended annex B is published Gov.UK.

2.45 In annex B page 25 final paragraph conservationists suggested that the UNECE definition of critical level is "above which direct adverse effects on receptors may occur according to present knowledge".

**Our response:** Agreed, we have amended the text.

2.46 In annex B page 26 paragraph two conservationists advised that acidification is not just about "acid rain". In terms of emissions from Intensive Livestock units AQMAU advise the main contribution to acidification is through dry deposition.

**Our response:** Agreed, we have amended the text.

2.47 In annex B page 26 paragraph two at the end of the sentence conservationists suggested that we say "map environmental risk (exceedance of critical loads & levels)".

**Our response:** Agreed, we have amended the text.

**Question 2b:** Is the new screening approach for small on-farm biomass boilers clearly explained? If not please explain where improvements should be made and why?

## Summary

We have provided clarity on the screening criteria, fuel types and thresholds proposed in this amendment to annex B.

2.48 Within the biomass boiler screening system union representatives asked why clean waste wood was excluded from applicable fuels. They added the low risk status is evident as the Environment Agency includes untreated waste wood burning in their U4 Waste Exemption.

**Our response:** We have updated the screening criteria to include clean non virgin timber, straw and Miscanthus. We have added additional text to highlight the different technical requirements and permit charges for boilers burning clean non virgin timber. Note that 'virgin wood' does include wood chip derived from virgin wood processing e.g. wood off-cuts, shavings or sawdust from sawmills or timber product manufactured dealing in virgin timber. Virgin wood used as fuel in an appliance is not subject to waste regulatory controls. Non virgin waste wood remains a waste until burned as a fuel. Its burning will normally be regulated by an environmental permit or through the U4 exemption. Burning of waste wood may be subject to the requirements of the Industrial Emissions Directive (IED) Chapter IV (equivalent to Waste Incineration Directive (WID)).

Excluded from IED Chapter IV requirements are boilers that only burn wood waste which does not contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings. For example: a typical on farm biomass boiler burning wood chip containing clean non virgin waste wood (not subject to IED Chapter IV). The applicant can use the criteria in annex B to screen emissions. The activity will fall under Section 5.1B (a) (v) of the EP Regulations: 'The incineration in a small waste incineration plant with an aggregate capacity of 50 kilogram's or more per hour of the following waste – (v) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings.'

2.49 Uncertainty at the origin of the 0.5MWth, 1MWth and 2MWth thresholds was expressed by union representatives.

**Our response:** The biomass boiler air emission screening criteria was developed to simplify the assessment of air emissions for applicants. The position statement sets out to define the conditions under which we do not need a bespoke risk assessment for applications. The purpose of those conditions is to ensure that we focus our attention on those applications that pose a potential risk to pollution. The 'net rated thermal input' thresholds given in the criteria are based on a modelling study by the Environment Agency's Air Quality Modelling and Assessment Unit.

The thresholds are not to be confused with EPR thresholds. The permitting and regulatory requirements depend on the type of waste wood being burnt, whether the waste wood is processed to make it suitable as a fuel and the size of the boiler appliance. Where an operator is proposing to move from oil/LPG heating to a biomass boiler system the environmental impact of air emissions from the new boilers may be different and therefore a variation application is required so that the impact can be assessed. On EPR intensive pig and poultry farms a typical biomass boiler used primarily to heat animal sheds will be treated as a Directly Associated Activity.

2.50 What evidence is there for these threshold values asked union representatives?

**Our response:** See our response to 2.49.

2.51 A trade association asked in annex B 'Air emissions from biomass boilers' for an assessment of emissions not to be required does the operator have to meet all these conditions or just some of them?

**Our response:** All the conditions need to be met. Fuel type and technical criteria apply regardless of boiler size. The third set of criteria has three options related to the size of the boiler, stack height and the proximity of nearby receptors. The applicant must meet the relevant stack height and proximity criteria associated with their size of boiler.

2.52 Referring to annex B Air emissions from biomass boilers, a trade association suggested that the aggregate boiler net rated thermal input is: "...within 25 metres.." relating to the second bullet is not required.

**Our response:** We propose to take no action as we believe the message is clear.

2.53 In annex B page 24 first paragraph a fellow regulator suggested that we insert 'nitrogen' after '...nitrogen dioxide..'

**Our response:** We believe this change is not necessary as it is covered by nitrogen dioxide.

2.54 In annex B page 24 first paragraph a fellow regulator asked us to please confirm this part includes assessment of nitrogen deposition as well as nitrogen dioxide.

**Our response:** In developing the screening criteria we considered the potential impacts from NOx emissions (eutrophication and acidification) on nature conservation features. So we believe no change is necessary.

2.55 In annex B page 24 first paragraph after bullets a fellow regulator requested we give examples of when a biomass boiler does not meet the criteria, for example when burning poultry litter waste.

**Our response:** This section has been amended with additional fuel types. Where the fuel type or the criteria cannot be met the applicant is referred to their Site Officer for a pre-application discussion.

2.56 Conservationists suggested that in annex B page 24, section on Biomass Boilers the distance screening for small combustion plant is inconsistent. See also annex F page 14.

**Our response:** We acknowledge that there is some inconsistency with the Air Quality Technical Advisory Group (AQTAG)<sup>14</sup> and we're working to resolve this. If the application doesn't meet the screening criteria then we will conduct a more detailed assessment during the determination of the application.

## 2.3 The Environment Agency's planned approach to implementing the statutory requirements of the Water Framework Directive (Annex D package of documents)

### Summary

There was only a single response to the general approach and its legal framework and that is given below.

3.1 An industrialist sought clarity between the equivalence in annex D for a substance classed as insignificant and the de-minimis test in Schedule 22 of the Environmental Permitting Regulations (EPR) 2010.

**Our response:** If an input is so small it can be determined not to be a groundwater activity and thus not subject to permitting requirements of EPR. But this provision is only in relation to discharges to groundwater, not to surface water. We refer to this exclusion as “de minimis”. There is no de minimis exclusion for surface water in the Water Framework Directive.

The “de minimis” ‘test’ only applies to discharges to groundwater and derives from the Article 6.3(b) Groundwater Directive (2006/118/EC). The provision is in paragraph 3(3)(b) of Schedule 22 to EPR 2010 and states as follows:

- “(3) The regulator may determine that a discharge, or an activity that might lead to a discharge, is not a groundwater activity if the input of the pollutant-- ...;
- (b) is or would be of a quantity and concentration so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater;”

**Question 3a:** Please tell us if in undertaking this new screening approach for hazardous pollutants in annex D1 you believe you will incur any significantly increased or decreased costs.

## Summary

This question prompted a number of responses. We have responded in terms of our role in the Accountability for Regulatory Impact process, which arises when a change in our procedures may result in an increase or decrease in the operator's costs. Changes to our screening approach also prompted a series of questions on topics such as monitoring data, ephemeral streams and the concentration of metals in total and dissolved form. Where possible we have grouped our response to these questions together.

## Background to this question

When we consider a change in policy, process or practice which has a significant financial impact on business, the government's [Accountability for Regulatory Impact](http://www.gov.uk/government/publications/regulator-impact-accountability) (ARI) process ([www.gov.uk/government/publications/regulator-impact-accountability](http://www.gov.uk/government/publications/regulator-impact-accountability) guidance) applies. This requires us to develop a formal Business Engagement Assessment and consult affected business sectors to seek a common view on the size of the impact. Government Departments are responsible for producing Impact Assessments to support new regulation. ARI is concerned with changes to regulatory approaches that fall outside of this process.

The following queries are taken from the responses received to the H1 consultation. Specifically where reference was made to increased or reduced costs resulting from our proposed change to the screening methodology included for hazardous pollutants.

3.2. A water company considered that the proposals within the public consultation should have been accompanied by a regulatory impact assessment. This should now occur once feedback on costs and impacts from stakeholders has been received.

**Our response:** In part, this consultation was undertaken to determine if the proposed changes would have a significant financial impact (positive or negative) across the affected sectors. This would help us to determine whether the full requirements of the ARI assessment process would need to be undertaken before implementing the change. As explained above, the government is responsible for producing Impact Assessments to support changes in regulation.

3.3. An operator pointed out that the sequential tests in the screening tool require upstream monitoring information. Where this is not currently available on large installations, obtaining this information will result in increased programme costs. These were estimated at £160,000 (£150,000 capital and £10,000 per annum for additional sampling). Further costs will be required for maintenance.

**Our response:** Operators have the option of obtaining upstream mean background concentrations, but this is not mandatory as part of a permit application. Upstream data will increase confidence in modelling outcomes and any permit limits which need to be set. If upstream data is not available assumptions can be made about the quality of upstream waters. This is acceptable, as deterioration in the river is measured against the EQS, rather than against upstream quality. Modelling outcomes obtained using assumed upstream data are therefore still valid. If there are no upstream data and the discharge is substantial, we accept that operators may prefer to collect and analyse their own data, but this is not obligatory.

3.4. A consultant commented that because of the more restrictive screening criteria, additional modelling will be required to support the assessment of discharges. This will result in increased costs to the operator, on top of what is already required for the analysis of metals and their low EQS. They cited the example of mercury and its compounds for which the EQS AA is 50ng/l.

**Our response:** This point relates to the screening process for the assessment of discharges into freshwater. In Test three we ask “Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed ten per cent of the EQS?”

In the previous version of annex D there was a two-step screening process where the pollutant was screened out if the PEC was less than 70 per cent of the EQS. The new Step three is a tightening of the screening process to deliver compliance with our long standing ‘No Deterioration’ policy. This requires control of discharges which cause more than ten per cent deterioration against the EQS. This No Deterioration policy has been applied to water companies and smaller industry for many years. ‘No Deterioration’ is also a requirement of the Water Framework Directive.

However, where discharges arise from IED Installations, the following will apply:

- The BAT Conclusions Document for each sector will set out what is considered BAT.
- Publication of the BAT Conclusions for each sector will trigger the initiation of an Environment Agency-led review of each permit within the sector.
- Operators within each sector will assess the impact of their surface water discharges where there are concerns about achieving an EQS within the receiving water.
- The need for an operator to go beyond BAT will be assessed on a case-by-case basis taking into account the costs and benefits.

Operators will be asked to provide evidence to inform this assessment.

The purpose of our new screening approach is to identify those substances which are ‘not liable to cause pollution’ of the receiving watercourse. This enables us and the operator to focus attention on those substances which pose the greatest risk to the environment.

By introducing the four-step screening approach, where step three refers to the No Deterioration test, fewer substances may be screened out. However, we can be confident that any substances which are screened out are not liable to cause pollution. It is accepted that in some cases additional modelling of discharges will be required and this may increase costs for some discharges. However, the modelling for the majority of freshwater discharges will be carried out by us, not the operator.

3.5. A water company thought that it would not incur any direct significantly increased costs by taking on the new screening approach for environmental permits. This was on the proviso that the Environment Agency continues to undertake the Monte Carlo modelling to define any relevant limits that may be required in the permit.

**Our response:** We have no plans to change our position as regards the undertaking of modelling assessment of discharges to freshwaters using the Monte Carlo software.



3.6. A chemical industries trade body found the eight-week period of public consultation insufficient for them to assess the views of the operators they represent. They added that, aside from the potential cost implications, they were able to conclude that the new screening proposals did not differ greatly from the current H1.

**Our response:** The consultation period was considered to be sufficient to carry out a high level assessment of the potential financial impacts of the proposed changes. The comments that the new screening proposals do not differ significantly from the current arrangements are also noted. The response suggests the financial impacts would not be significant but any reasonable requests for additional time would have been considered as per previous consultations.

3.7. Concerns were expressed by a water company that additional monitoring and “detailed assessment” for hazardous pollutants and sanitary determinands will involve:

- substantial costs,
- lead-in time to change scientific and technical capabilities, and
- laboratory capacity to process these requirements.

It considered that it is not feasible for such requirements to become mandatory for operators in 2014.

**Our response:** Monitoring and assessment of hazardous substances is not a new requirement as it was required under the Dangerous Substances Directive (DSD). Many of the hazardous substances are common to the DSD and Water Framework Directive. As stated in annex D, the permitting process for sanitary determinands is unchanged so we do not consider that this will result in increased costs. The costs and technical capabilities for laboratories to measure hazardous pollutants may have increased, but this reflects changes within the EQS Directive. It is not necessary for operators to monitor discharges for all substances that may be present in sewage. However, we would expect testing to be targeted at those substances most likely to be present in the discharge for example those discharged to sewer via trade effluent consents.

3.8 One water company suggested that an RIA should be completed and publicised in the consultation before such a policy change is implemented. This should include where the Environment Agency aimed to restrict any additional pollutant load discharged to water bodies and limit any within class deterioration.

**Our response:** We do not consider that the new H1 risk assessment procedure substantially changes our previous requirements to limit the pollutant load and limit within class deterioration. Please also note our response to 1 above in respect of the regulatory impact assessments.

3.9 Various respondents expressed concerns that for discharges into lakes, canals, reservoirs or coastal waters, operators would have to carry out their own modelling in phase two. This could incur additional costs, and these costs should be reflected in reduced application fees paid to the Environment Agency.

**Our response:** Historically, we have used Monte Carlo and mass balance modelling of rivers to determine river needs permits for stand-alone water discharges. Modelling of canals, lakes, reservoirs and coastal waters is not straightforward. In many cases a site-specific hydrodynamic model is needed, and historically the onus for undertaking

this modelling has rested with the applicant. We do not perceive there to be any change to this in our proposals. Neither do we think our role in providing advice about the modelling required, auditing of operator submissions and assessing the model output has changed. Consequently there are no plans to reduce application fees as a result of the proposed change to the screening methodology.

### **General Information**

In determining whether or not the financial impact from the proposed screening approach will be significant, the total impact needs to be considered. The proposed approach applies across the broad range of regulated facilities permitted under EPR. One operator identified additional costs associated with obtaining upstream monitoring information for installations, but did not clarify whether these were considered significant. In our response we have explained this requirement is not mandatory. This is because there is a well developed alternative for modelling discharges without the need for actual sampling and analysis of upstream waters. This enables permit determinations to be satisfactorily completed without additional cost to the operator. In proposing to implement our new screening and modelling approach, step three of the screening process does represent a tightening for discharges from IED installations. However, this is required to enable us to implement 'No Deterioration' which is a requirement of the Water Framework Directive. How we will implement this change across industrial sectors is explained above.

### **Our conclusion**

The responses received suggest that the proposed change may result in some increased costs for operators. However some of the potential costs identified arise from discretionary data collection and analysis.

We will take unavoidable increases in regulatory burden into account in reaching our decision on how to implement the proposed screening approach for hazardous substances. But, as the consultation responses suggest, these are not significant and so we are not required to produce a formal Business Engagement Assessment.

## Summary

In response to question 3a we received a number of queries about ephemeral streams and these are grouped together below.

3.10 Looking at annex D1 Test two an installation asked where discharges are made to ephemeral streams should annual rainfall be the basis for calculations?

**Our response:** Section 5.5 gives some general guidance on dry / ephemeral watercourses and rainfall dependent / intermittent discharges. The section recognises that no one single assessment methodology will be appropriate. The assessment will be driven by the local sensitivities, needs and significance of the receiving watercourse and/or groundwater receptors. For rainfall-dependent discharges making an assessment using annual rainfall for the site may be appropriate. We have clarified this in the guidance.

3.11 An installation asked about calculating significant load based on modelled rainfall data where streams are ephemeral or exist as a result of the discharge. In this case the flow rate of the discharge would be used in calculating the significant load.

**Our response:** Significant load is calculated from discharge load only and is not affected by receiving watercourse flow. For rainfall-related discharges using rainfall data to estimate discharge flow may be an appropriate approach where flow is not measured. This is assessed on a site by site basis. We have clarified this in the guidance.

3.12 Again relating to ephemeral streams an installation asked if rainfall measured on site could be used to calculate significant loads.

**Our response:** See the response to 3.11.

3.13 Considering discharges into ephemeral streams, where no upstream data are available, an installation asked if discharge quantities would be acceptable for modelling.

**Our response:** A pragmatic approach is adopted when permitting the following:

- discharges to dry ditches (see 5.5.2 of annex D1);
- ephemeral streams with the local sensitivities,
- needs and significance of the receiving watercourse and/or
- groundwater receptors driving our approach.

Our approach will be site-specific, for example, where the receiving watercourse is a dry ditch of low ecological and amenity value. Where this joins a larger flowing watercourse within a short distance, flows from this downstream location would be used to undertake the risk assessment.

Modelling cannot be carried out with no river flow data as the outcome of the modelling test would effectively be the same as the screening tests. If the discharge itself has a concentration of less than ten per cent of the EQS, the substance will be screened out. If the discharge quality is less than EQS, it will not cause or contribute to a failure of EQS. We have clarified this in the guidance.

Other responses to question 3a are included below.

3.14 A water company sought clarity on which elements of the Water Framework Directive (WFD) are statutory. It suggested that preventing deterioration of water body quality does not reflect the stated aim “..to restrict any additional pollutant load discharged into the water body.” And the modelling approach does not lead with certainty to effluent standards being set.

**Our response:** The prevent deterioration requirements of WFD are statutory. As stated in annex D our aim is to restrict additional pollutant load. However, restrict does not mean prevent. Our guidance makes it clear that where it is not possible to ‘restrict’ we will seek to limit within class deterioration. This approach ensures that we meet WFD requirements to protect and improve water quality, whilst also managing discharge quality and pollutant load.

It is correct that the modelling approach does not always result in effluent standards being set. Modelling builds on the screening tests and is a more detailed examination that determines if effluent standards are required.

3.15 A water company concluded it was premature to develop a permitting approach which established a de facto implementation before completion of CIP2 and Government endorsement. This was against the backdrop of their commitment to the Chemicals Investigation Programme (CIP2) which will inform Government policy on the regulation of EQS.

**Our response:** We agree the CIP2 will provide much useful information that will help inform future permitting policy. However control of hazardous pollutants via permits will continue to have an important role in minimising the impact of substances in discharges. We need a permitting approach now that enables us to meet WFD requirements. The approach will be updated in response to any policy changes that follow CIP2.

3.16 The task of obtaining mean background concentrations at the point of discharge was described by an industrialist and water company as very difficult and expensive. They added that for existing discharges it would be difficult to obtain a background concentration at the point of discharge.

**Our response:** Mean background concentrations should be obtained upstream of the point of discharge, rather than at the point of discharge. We have clarified this in the guidance. Operators have the option of obtaining upstream mean background concentrations, but it is not mandatory as part of a permit application. Upstream data will increase confidence in modelling outcomes and any permit limits which need to be set. However, if operator or our own upstream data are not available, assumptions will be made about upstream quality. This is acceptable, as deterioration in the river is measured against the EQS, rather than against upstream quality. Modelling outcomes obtained using assumed upstream data are therefore still valid.

Information on background concentrations near the point of discharge can be requested from us and data will be provided where available. We aim to operate in a fair and transparent manner in licensing use of our data and information. In so doing we have to meet various legal obligations that govern access and reuse: these obligations may result in a charge in some cases. Data Share is one way that we share data and statistical information; it is available via this link [www.geostore.com/environment-agency](http://www.geostore.com/environment-agency). Alternatively, our National Customer Contact Centre can be contacted on 0370 850 6506.

If there are no data, and the discharge is substantial, the operator/applicant may choose to collect their own data in support of their application.

3.17 A consultant asked if the new annex D would be accepted by SEPA or would it produce its own guidance?

**Our response:** To coincide with the introduction of the Environmental Permitting Regulations (EPR) we alone published H1 in modular format in April 2010. We have since published changes to the H1 system in 2011. H1 remains an Environment Agency only publication. It remains a decision for SEPA should it wish to develop its own version of H1.

3.18 The identity of activities which can operate under a 'low risk position statement' was sought by a consultant.

**Our response:** There are a number of low risk position statements for activities regulated under the Environmental Permitting (England & Wales) Regulations 2010. For your specific activities you will need to investigate whether a permit is required. For water discharge activities there are currently low risk position statements for:

- Discharge of water from a heat exchange system serving a domestic property (PDF, 66KB)
- Temporary water discharges from excavations (PDF, 74KB)

3.19 A consultant asked when Drinking Water standards (page 10) should be used and their use limited to occasions when WFD standards were absent.

**Our response:** Where they are applicable, all standards within a Directive or Regulations need to be considered in any assessment. For example, annex D says "Determinands used by the Drinking Water Directive and other determinands specified by water companies to protect water supplies in Drinking Water Protected Areas, must not deteriorate". The use of these determinands is not intended for those occasions when WFD standards are absent.

3.20 Details of the costs associated with the production of predicted no effect concentrations (PNECs) provided by our National Laboratory Service (NLS) were sought by a consultant.

**Our response:** We currently would not charge for requests as our permitting officers would also require the information to assess the application. We would need to review this position if demand increased significantly and we needed to provide additional resources to this service.

3.21 The availability of (PNECs) provided by our (NLS), prompted a consultant to ask will these values be used in assessments and under what circumstances?

**Our response:** Suitable PNECs will be used as a surrogate EQS where a potentially hazardous substance is being discharged but the substance does not have a designated EQS. Our PNECs are based on a desk top assessment of information readily available in the public domain. However, for some substances we may not be able to provide a PNEC and the operator may be required to undertake their own assessment.

3.22 Assurance on the time taken by the NLS to produce PNECs was sought by a consultant.

**Our response:** Request for PNECs should be made during pre-application discussions via area staff or permitting officers. They will request the information from our internal Environmental Toxicology Advisory Service (ETAS) and co-ordinate the response to you. Based on current level of demand for this service, we would respond to requests for information within a maximum of 20 working days.

3.23 A consultant noticed that maximum concentration and effluent flow are required for short term assessments and comparison with the EQS Maximum Allowable Concentration (MAC). They asked why not the 95 percentile as it is in current guidance.

**Our response:** The Part A screening tests of significance are designed to be simple tests on readily available statistics for datasets of 12 or more samples. Where substances are screened out, we are confident that they are not liable to cause pollution. Using maximum effluent load reflects a worst case scenario. This may result in an increased chance of a substance passing forward to the Part B modelling tests of significance. However, when compared with using 95 percentile data, there is no overall change to the outcome of the assessment.

3.24 Must all effluent analysis be undertaken by a UKAS accredited laboratory, asked a consultant?

**Our response:** Yes, all effluent analysis must be carried out by a UKAS - accredited laboratory. We have confirmed this in the guidance, which now says “must be carried out” rather than “should be carried out”.

3.25 A consultant asked if final effluent concentrations are available only from the water company responsible for managing sewage treatment works (STW).

**Our response:** Water companies monitor their own effluents as part of OSM (Operator Self Monitoring). These data are submitted to us and we place the data on to our public register.

3.26 A consultant asked if the analysis of ‘priority substances’ can be requested of water companies as they are not usually analysed for?

**Our response:** We cannot ask water companies to monitor for substances in their discharge unless:

- we have reason to believe the substance is present in the discharge ( because it is being discharged into the works by a trader),
- the receiving water body is failing its EQS for a substance and the sewage works is a potential source of that substance.

3.27 A consultant asked if we should be contacted every time an H1 assessment is carried out for the correct reported and target standards which apply with respect to River Basin Management Plans?

**Our response:** It is not mandatory but pre-application discussions with us are advised. Contact our National Customer Contact Centre, on 0370 850 6506, or local area office. Our documentation will be kept up to date and the Chemical Standards Database is currently the best source of information.

3.28 In the consultation we said we will carry out modelling work associated with discharges to freshwater, with the exception of discharges to lakes, canals or reservoirs. A consultant asked if we will levy a charge for such modelling under the terms of the Environment Act 1995.

**Our response:** The application fee covers the cost of normal permit determination modelling assessments required to calculate the limits needed to ensure any permitted discharge is environmentally protective. In the case of more complex assessments, such as particular sensitive sites or novel technologies, the applicant would be expected to provide the necessary information as part of their application. To do this they would have to undertake (or procure) the necessary more complex modelling and assessments prior to making an application for an EPR permit. Pre-application discussions with us are important to ensure any pre-application work is targeted.

3.29 In the consultation we said 'Operators may also carry out modelling if they wish to, but the Environment Agency will use its own modelling to determine any limits or conditions which are set on permits and/or will audit operators' submissions.' A consultant suggested that to facilitate this it would be necessary for us to make readily available the tools for undertaking such assessments. They referred specifically to the Monte Carlo mass balance model.

**Our response:** The River Quality Planning suite of applications - which includes the Monte Carlo mass balance tool - is available from us under licence. Contact our National Customer Contact Centre, NCCC on 0370 850 6506.

3.30 Changes in annex D prompted one consultant to ask if any transitional provisions were being introduced to manage the changeover. If so, how would the changeover impact upon assessments currently being developed between an operator and their consultants?

**Our response:** Internal procedures to implement the screening and modelling procedures within annex D1 are already in place. We suggest that by engaging in pre-application discussions the potential for reworking information that relates to an application can be minimised.

3.31 An opinion expressed by one consultant was that additional costs would be levied on operators if risk assessments need to be revisited. This was because of the introduction of the new annex D, with the potential for delays to the implementation of infrastructure projects.

**Our response:** We have amended annex D1 to reflect the requirements of the Water Framework Directive. This has resulted in the change to our screening methodology for discharges to surface waters. Applications being determined prior to the introduction of our operating procedure in January 2013 are likely to have been processed using the previous annex D methodology. If so, they will be revisited when the IED permit review mechanism prompts a response to an EPR Regulation 60 Notice.

3.32 One consultant thought the inclusion of section numbers makes annex D1 simpler to navigate. They suggested that section numbers should be retained and included in the final published version of the document.

**Our response:** Section numbers will be retained.

3.33 Referring to annex D3 a consultant thought this document as unnecessary as it duplicated much of what was in annex D1.

**Our response:** We will incorporate the current data in annex D3 into annex D1 and annex D2 as necessary.

3.34 A consultant felt it would be simpler to update the Chemical Standards Database with the annex D summary tables and link it to the document(s).

**Our response:** The chemical standards database is currently being updated to include all the WFD standards, and will be published on the revised gov.uk website. However, the EQS summary tables in annex D will also be kept up to date. They are useful, as they list all the standards which are relevant to this guidance in one place. The chemical standards database includes a wide range of standards. For those who are unfamiliar with chemical standards, it may not always be obvious which standards are relevant.

3.35 Public Health professionals thought the term “hazardous pollutants” was not clearly defined in annex D1. Aware of the specific definition of this term in relation to the Groundwater Directive, they sought clarity on what the term means in annex D1.

**Our response:** The Groundwater Directive uses the term “hazardous substances”, so it was not appropriate to use this term for substances which are impacting on surface water. Page seven of annex D1 defines “hazardous pollutants” as follows: “This guidance applies to substances being discharged to surface waters which are covered by the EQSD (priority hazardous substances, priority substances and “other pollutants”). It also applies to specific pollutants and other substances listed in the Ministerial Directions, and substances which have operational (non-statutory) EQSs. These substances are all grouped together for the purpose of this guidance and referred to as “hazardous pollutants”

3.36 An industrialist thought the new screening approach could incur additional costs, due to the ‘heavy reliance on acquiring good quality data for upstream chemical analyses.

**Our response:** Operators have the option of obtaining upstream mean background concentrations, but it is not mandatory as part of a permit application. Upstream data will increase confidence in modelling outcomes and any permit limits which need to be set. If upstream data are not available, assumptions will be made about upstream quality. This is acceptable, as deterioration in the river is measured against the EQS, rather than against upstream quality. Modelling outcomes obtained using assumed upstream data are therefore still valid.

3.37 An industrialist stated that there would be extra costs incurred by operators to provide both total and dissolved metal analysis.

**Our response:** Operators have the option of undertaking all tests of significance using just total metal rather than both total and dissolved data. This is a conservative approach and effectively assumes that all total metal could partition into the dissolved phase in the receiving water. An emission limit is more likely to be imposed when the assessment is made using total metal data rather than dissolved metal. However, if the discharge encounters little dilution the use of total metal data is unlikely to affect the outcome of the assessment. In such cases the operator may prefer to provide total metal data only.

3.38 An industrialist presumed the introduction of the new Test three was an interpretation to ensure “no deterioration” within the status of surface waters. They thought “ten per cent” an arbitrary figure which may be useful in screening tests but it should not be rigidly applied to modelling tests.



**Our response:** We have defined “significant deterioration” as an increase of ten per cent or more of EQS in the receiving water quality. We use this test in both the screening and modelling assessments. Failure of the “significant deterioration” requirement in modelling means that an emission limit is required on a permit. However, it does not define what this permit limit should be. As detailed in the guidance, there is some flexibility when setting permit limits. The flexibility is dependent on the individual circumstance and receiving water quality which takes account of what is technically feasible and affordable.

3.39 A trade association sought clarity on the scope of the new screening assessment. They noted the new guidance states that all substances which are considered to be present in the discharge (as defined) must be assessed. They asked does this mean all substances listed in Appendices one and two of the revised H1 annex D1 if there is no baseline report available.

**Our response:** We do not expect an applicant to analyse for all substances which have an EQS. If no baseline report is available, applicants should analyse for the substances which are likely to be in the discharge. This is either because:

- they are known to be added to the process,
- they are a known product of the process, and/or
- they have been measured in the effluent of a similar/comparable process elsewhere.

3.40 An industrial trade association noted the limits of quantification (LOQ) for the available test methods for some substances listed in annex D1 are similar to the EQS limits. In such cases, use of the screening approach may not be possible and Phase two modelling would be required. This would introduce significant and disproportionate costs, in particular where reliable analytical data are not available for substances present at concentrations around or below the LOQ.

**Our response:** Limits of detection (LOD) for analytical methods should ideally be at or around ten per cent of EQS. There are a number of substances where the current LODs for available methods are higher than this, but analytical methods are being developed to remedy this.

We can carry out both screening and modelling using data with higher LODs. For screening, we take all less than values at face value, as this represents the worst-case scenario. If the limit of detection is at or close to the EQS, it is likely that a number of substances will pass through to the modelling stage using this approach.

For modelling, less-thans are taken at half face value. For discharges to freshwaters, we carry out modelling using Monte Carlo, and it is a relatively quick and simple process. However, for discharges to TraC waters, the applicant is required to carry out the modelling. This can be a complex and potentially expensive process, depending on the nature of the discharge and the receiving water. For discharges to TraC waters with high LODs where substances have not been screened out, each discharge should therefore be assessed on a case-by-case basis. This should occur as part of the pre-application process and before any modelling is commissioned. We would work with the operator to assess the substances being discharged. In so doing we would also consider the sensitivity of the receiving water and the potential for significant deterioration and/or EQS failure. We would then agree the actions which needed to be

taken. They may require modelling, re-analysis of the effluent to a lower LOD (if possible), monitoring of the receiving water or a number of other options.

3.41 The refineries trade association sought clarity on what assessments would be required under the IED for discharges to surface waters (e.g. hazardous pollutants). Specifically, whether this assessment will be required as part of the IED permits review or when prompted by revision of the Best Available Techniques reference document (BREF)?

**Our response:** On publication of the Refinery's Best Available Techniques Conclusions we will initiate a review of the sector permits in England. We will ask operators if they can comply with the BAT Conclusions Document and the BAT Associated Emission Levels. Where there is evidence that the concentration of hazardous pollutants could be an issue in the local water environment, operators will be asked to respond. The response will assess whether their discharge includes hazardous pollutants and if so what could be done to reduce or eliminate those emissions.

3.42 The refineries trade association suggested a very significant investment would be required to deliver compliance with an emission limit value (ELV) set below BAT AELs to meet the EQS.

**Our response:** DEFRA guidance on the Industrial Emissions Directive ([here](#)) makes clear that BAT Conclusions shall be the reference for setting EPR permit conditions. It adds that permit conditions stricter than BAT may be set, but only:

- where this is necessary to ensure that no significant pollution is caused in accordance with the general principle in Article 11, or
- where an environmental quality standard requires this in accordance with Article 18.

3.43 The refinery trade association highlighted the very high costs for refineries to reduce the content of a range of pollutants to ensure compliance with EQS. For larger refineries, such as those in the UK, this was based on the implementation of a technique that is not recognised as BAT for the refinery sector.

**Our response:** The BAT Conclusions Document for the refinery sector will set out what is considered BAT for refineries. As indicated in the reply above, refinery operators are likely to have to assess the impact of their surface water discharges where there are concerns about achieving an EQS within the receiving water. The need for a refinery operator to go beyond BAT will be assessed on a case by case basis taking into account the costs and benefits. In such cases operators will be asked to provide evidence to inform this assessment.

3.44 A water company considered the permitting process beyond the operator taking on the new screening phase. It asked if we will be reducing the period required for the turnaround of permits.

**Our response:** Since the Penfold report produced by government in November 2011 we have been working to a maximum determination time of 13 weeks. We are not aware of any plans to alter this timescale. Each determination takes into account site-specific factors. These include proximity to designated habitats sites and standard requirements, such as allowing time for the public to consider application details and submit representations. We must allow time for these considerations but, wherever

possible, we will issue a permit as soon as determination is complete. This is often in advance of the 13 week deadline. Good discussions in advance of an application and thorough and complete applications are two things which help us determine applications more quickly.

3.45 Discharges to dry ditches prompted a water company to ask if we would be supplying upstream water quality monitoring data and Q95 flows. If not available how would the calculations be undertaken?

**Our response:** We will supply Q95 and monitoring data on request, where available. Where these data are not available we can advise of the appropriate data to be used in the calculations.

A pragmatic approach is adopted when permitting the following:

- discharges to dry ditches (see 5.5.2);
- ephemeral streams with the local sensitivities,
- needs and significance of the receiving watercourse and/or
- groundwater receptors driving our approach.

Our approach will be site-specific. For example where the receiving watercourse is a dry ditch of low ecological and amenity value and joins a larger flowing watercourse within a short distance, flows from this downstream location would be used to undertake the risk assessment. We have clarified this in the guidance.

3.46 A multiple-facility installation queried the requirement to cease or phase out priority hazardous substances (PHS). Referring to annex D1, page 10, paragraph 1.4 it wondered if the implementation of this aim would limit their operations with radioactive substances.

**Our response:** Cease and phase out is a Water Framework Directive requirement which the UK has a statutory duty to comply with. We consider that cease and phase out is a proportionate aim for priority hazardous substances as these present the greatest risk to the environment. The guidance makes it clear that meeting the EQS achieves the cease and phase out obligation, until DEFRA provide further direction. Radioactive substances are not within the scope of annex D of the guidance.

3.47 The same installation suggested that screening should be limited to process-related substances likely to be present in the discharge. Where a substance is continually present at less than the LoD, it should not be considered as part of the screening test or included in the permit.

**Our response:** Screening should be carried out on all substances likely to be present from any source. We agree with the second statement, providing the LOD is no greater than ten per cent of the EQS.

3.48 Looking at the “inland waters (freshwaters) section (Page 11)” the industrialist thought the document does not make it clear that the screening tests are progressive. However, this is noted in section 2.3.1. It would be helpful to include the statement regarding the ability to screen out substances at any one of these stages in this section.

**Our response:** We have clarified this in the introduction (Section 1.5.1).

3.49 An industrialist asked us to explain what we mean in section 1.5.2 by “If the impact on the watercourse is unacceptable, the permit application will need to be refused”.

**Our response:** The permitting outcomes are summarised in Figure 6. Permits would normally be refused where a proposed new discharge of a substance would:

- cause or contribute significantly to a breach of EQS, or
- adversely affect a designated conservation site and there are no appropriate mitigation measures available to an operator to reduce the concentrations of the substance in the discharge to an acceptable level.

We have clarified this in the guidance.

3.50 New screening proposals were submitted by an installation. They suggested where only one or two substances required modelling, the screening criteria should be extended to avoid the need for modelling the discharge.

**Our response:** All substances which are potentially liable to cause pollution must be modelled, to determine whether they need to be controlled in the permit.

3.51 An installation suggested where high upstream concentrations results in a failure of the PEC, we should focus our efforts on reducing the impact of discharges upstream.

**Our response:** We identify failing water bodies and target improvements as part of the river basin planning process. Regulating individual effluents which discharge into, or downstream of, failing water bodies is only one part of this overall process.

3.52 An installation suggested that by assuming the upstream concentration of pollutant in the river was ten per cent of the EQS, then the screening test will fail.

**Our response:** We assume upstream water quality will be at ten per cent or 50 per cent of EQS where there are no suitable sample data. This is influenced by upstream inputs. The “risk of significant deterioration of receiving water quality” test will not necessarily be failed by making this assumption. This is because the test looks at ten per cent of EQS deterioration on upstream quality. However, this test can fail when assuming upstream quality is ten per cent of EQS, if effluent quality is less than EQS and there is low dilution in the receiving water.

3.53 In ‘Next Steps’ an installation suggested paragraph B contradicts a previous statement which states if Tests one and two are passed then no further assessment is necessary.

**Our response:** We have amended this text to make it clearer.

3.54 One of our respondents operates as an installation but also uses radioactive substances. Drawing on that experience they suggested consideration should be given to quantifying uncertainty in the analysis where it’s above the limit of detection. This was preferable to immediately specifying a numerical value for the permit where the limit of detection slightly exceeds the environmental quality standard.

**Our response:** We include conditions within EPR permits for the monitoring of non-radioactive substances released to the environment. The level of detail depends on

whether the operator is UKAS accredited. If the monitoring organisation or laboratory does not have MCERTS accreditation, then we specify the monitoring method as an extra in the permit. We would also refer to our monitoring guidance note M18. If the operator undertakes their own sampling we would expect this to be undertaken by competent people. This activity would be covered by the management system rather than being separately specified in the permit.

If the operator is MCERTS accredited, then we don't include the monitoring method in the table. This is because the monitoring organisation should have MCERTS accreditation and the lab will be using accredited methods. We would expect an MCERTS laboratory to provide levels of uncertainty with the results.

3.55 Considering part time flows an installation asserted that for such discharges the flow should not be proportionately reduced in the calculations. For example, calculating an effluent discharge of 100 litres/s and 50 litres/s because the discharge only occurs for 12 hours a day is not sound science.

**Our response:** We are confident that we have adopted the correct approach. In the example given, the annual average discharge flow rate of 50 litres/s is used in relation to the Annual Average EQS. For the MAC EQS, the flow rate of 100 litres/s should be used, as outlined in the last paragraph of section 3.3.2 on page 41 and in section 2.3.1 on page 21.

3.56 Reassurance was sought by an installation whether the approach described in annex D1 section 3.3.3 applies to all watercourses or only those which we regulate?

**Our response:** Under the Environmental Permitting Regulations 2010 (EPR10), most watercourses and coastal waters are covered by the regulations and therefore the requirements of the annex D1 requirements. This can include isolated lakes and ponds.

The watercourses covered are defined in EPR10 Schedule 21 and relate to 'inland freshwaters, coastal waters or relevant territorial waters...' These have the meanings given in section 104 of the Water Resources Act 1991. In effect this means that lakes or ponds which do not have an outflow are not directly regulated. However the permitting regime can apply if we issue a Schedule 21 Paragraph five Notice. This requires the operator of a discharge into an isolated lake or pond to hold an environmental permit authorising them to be able to discharge.

3.57 An installation suggested the 'liable to contain' test should be limited to substances discharged by the process, rather than substances naturally occurring in the waters, for example as a result of run-off from site contaminated with legacy substances. This should also be considered during the screening phase.

**Our response:** Where substances are naturally occurring or as a result of previous site contamination they still need to be assessed. Failure of an EQS means that the substance is potentially hazardous and/or toxic to the biota in the receiving environment. Deterioration against an EQS means that the substance is potentially liable to cause pollution. Substances which are "naturally occurring" in waters can also be concentrated or altered by industrial processes, so must be assessed. Substances present in waters which have been abstracted from a different source are classified as not naturally occurring in the receiving water. We would look at naturally occurring substances but would not necessarily include them in the permit.

3.58 One respondent, with a history of ten years of Environment Agency sampling of their effluent, challenged the statement that the limits of detection (LOD) were

mandatory. They suggested this must depend upon the sampling methodology and the matrices of the sample being submitted.

**Our response:** Section 3.2 of the guidance states that:

If applicants submit sample data which has not been analysed to these LODs, they must provide justification for this with their application. Possible reasons for not measuring to the required LOD include the following:

- Samples may be from varying matrices (e.g. clean water, polluted water, sewage effluent or industrial effluent) and/or may need to be diluted before they can be analysed.
- The discharge may be receiving large dilution, and analysis down to the LOD may not be justifiable as the discharge will not be liable to cause pollution.

The guidance therefore accepts that LODs may vary according to sample matrices or other situations. The guidance also states that:

- If samples have not been analysed to a sufficiently low LOD, the data should be run through screening taking the less than at face value. If the substance is screened out, no further action is required.
- If the substance is not screened out, more accurate data will be required to determine if the discharge is significant.
- If more accurate data are not available, a monitoring requirement or numeric emission limit will need to be included in the permit as a precautionary approach.

3.59 The same respondent suggested that differing limits of detection have been quoted in results given by us to those presented in section 3.2 of annex D1. They recommended that comparison between the LOD and EQS be used rather than those in section 3.2.

**Our response:** Limits of detection are often revised, both as EQSs are tightened and as analytical methods improve. We are therefore likely to have quoted differing LODs for a number of substances in the past. Ideally, the LOD should be ten per cent of the EQSs. However, this is not achievable for all substances, and so our laboratory provides a list of the LODs which it currently can achieve. We do not expect operators to achieve LODs which our laboratory cannot achieve.

3.60 Where the LOD is close to or less than the EQS one respondent felt modelling should not be required. They thought the second paragraph on page 46 tried to say this but did not make itself clear.

**Our response:** We cannot discount substances in a discharge if the analysis has not been carried out to a sufficiently low LOD; we still need to assess them to determine if they are potentially liable to cause pollution. Modelling is the most accurate way to do this.

Less than values are treated as face value in the screening phase regardless of LOD as a simple conservative assumption. For the modelling phase, less than values are taken at half face value. If modelling shows that substances present at this concentration are liable to cause pollution, they cannot be discounted. In such cases we may set an emission limit if there is a risk of significant deterioration and/or an EQS failure. We may also require further monitoring at a lower LOD so that we can make a

more accurate assessment of the impact of the discharge. If there are LOD issues for certain effluent matrices, we would need to address such situations on a case by case basis. We have clarified the guidance to say that for discharge to TraC Waters, where modelling is potentially complex, we would look at each discharge individually. This would be in conjunction with the operator with a view to agreeing a way forward.

3.61 The same respondent asked how the number of samples in Table two was derived.

**Our response:** The numbers were derived using the binomial distribution. They indicate the number of samples needed to be 95 per cent confident that a substance is there for more than ten per cent of the time.

3.62 One respondent suggested the sentence in paragraph two, page 47 should say that a dataset should contain 12 samples analysed over a year to generate an annual average.

**Our response:** This response refers to Section 3.3.4 “limited number of samples” which states that a minimum of 12 effluent samples are required for screening and modelling. An annual average can be generated from any number of samples. However the resulting annual average and associated standard deviation are unlikely to represent the true situation if fewer than 12 samples have been used.

3.63 An industrialist challenged the premise that less than values should be expressed as half the LOD for purposes of modelling. They suggested that less than values should be expressed as half the LOD only where less thans exceeded the EQS by more than ten per cent.

**Our response:** To comply with the Water Framework Directive, we need to limit deterioration as well as ensuring compliance with EQSs. Taking the approach suggested in the question would not do this. It would assume that where the LOD is less than the EQS the substance concentration in the discharge is zero, which often would be unrealistic. This means that many discharges that needed limits to prevent deterioration would not be controlled and deterioration would occur. Using half the LOD for modelling purposes sets the right balance between being fair to the operator and protecting the environment.

3.64 The industrialist went further saying that screening tests should be adjusted to remove substances showing concentrations below the LOD where the LOD was less than the EQS.

**Our response:** If the LOD is less than ten per cent of the EQS, the substance will be screened out in Step one of screening and will not be modelled.

3.65 The industrialist added modelling should be limited to substances where the concentration is less than the LOD. This should apply where the LOD exceeds the EQS by ten per cent.

**Our response:** Modelling may be required for any substance where the LOD is greater than ten per cent of the EQS. This is because we are modelling to assess both EQS compliance and deterioration against the EQS in the watercourse. A numeric limit would not be added to a permit where all the measured values for a substance were less thans. If we believed a substance may be liable to cause pollution, it is likely that a monitoring condition would be added to the permit. This would enable data to be collected at a lower LOD.

3.66 One respondent asked us to explain how we will treat discharges that may change the EQS by more than three per cent, particularly where deterioration in the upstream water quality is already at or greater than three per cent?

**Our response:** The last paragraph of page 53 acknowledges that where there are upstream failures of EQS, a new discharge would not automatically be precluded. A new discharge which would not significantly contribute to the failure of the standard is likely to be acceptable. The 3 per cent of EQS cited is a guide as to what would be regarded as not significant. However, for all water bodies that are failing EQS, we will investigate the causes of failure. Once identified, by implementing our action plan we will reduce pollution from existing sources in the catchment in a proportionate way to achieve EQS compliance.

3.67 Looking at section 5.5.3 of page 62 of annex D1, one respondent suggested that we should not limit discharges where they are caused by rainfall. They added that EPR permits should be limited to process-derived discharges only. Where discharges are contaminated by legacy land contamination these should be dealt with under the appropriate regulatory regime.

**Our response:** All discharges of hazardous pollutants to surface waters must be assessed. The actions taken and/or control required are assessed on a case-by-case basis. EPR is the appropriate regulation for controlling potentially polluting discharges to the environment. Intermittent discharges which are known to be contaminated need to be included within any assessment when being released to the environment. We appreciate that there are background levels and contamination acquired from legacy activities and the assessments aim to take these into consideration.

3.68 Within paragraph three on page 63 one respondent suggested that discharges should be controlled through SuDs systems and catchment delineation on large sites.

**Our response:** This is an option for controlling discharges. However, discharges from these systems into surface waters would still be assessed in case they failed to remove all hazardous pollutants in the discharge.

3.69 Continuing the theme, the respondent suggested that only toxicity data gathered from appropriate sources is should be used to derive a threshold value. They added "By this I mean sources that are suitable for the source and the ecology specific for the river/influenced environment."

**Our response:** We agree that appropriate toxicity data should be used.

3.70 A typo was identified on page 17 where Table 1.3 refers to Table 1.3 when it should refer to Table one.2.

**Our response:** We will change this before annex D2 is republished on Gov.UK.

3.71 Referring to the same page it was suggested by one observer that the phrase 'Annual Mean' should say 'Annual Average' to be consistent with the rest of annex D.

**Our response:** We have corrected this in the guidance.

3.72 An industrialist requested we fully explain 'No Deterioration' to our inspectors and provide them with adequate training to avoid any misinterpretations.

**Our response:** We have informed our staff of the implications of the changes to H1. Support staff will be available to advise front-line colleagues.



3.73 A water company thought it unreasonable for us to require operators to provide extensive and comprehensive sample analysis at the permit pre-application stage, particularly as it covers all substances that may be present in the effluent.

**Our response:** Sampling and analysis should be targeted at those substances most likely to be found in the effluent at concentrations that are liable to cause pollution. This would include substances expected to be found in effluent such as those that are known to be discharged into the sewerage catchment. It is the operator's responsibility to ensure a good understanding of the substances in their discharge. Our expectation of them as the operator is being able to decide on the substances that need to be analysed for.

3.74 The company added it was also unreasonable because total and dissolved levels need to be provided.

**Our response:** For the Phase two modelling tests, metals are assessed using both total and dissolved metal data. This will give a fairer assessment of the impact on receiving water quality. This is because not all total metals will exist in the dissolved form (most metal EQSs are for dissolved metals).

In Phase two, the risk to EQS is assessed using total metal data. Although precautionary, this ensures that:

- the EQS will be met downstream. It is rarely possible to predict how much total metal will partition to the dissolved phase in the receiving environment with time; and
- it also controls the total load discharged to the catchment.

The risk of deterioration of river quality is assessed using dissolved metal data, where available. Referring to the percentage change to EQS caused by the discharge, we compare the predicted substance downstream concentration against the EQS. If dissolved data are not available, total metal data should be used, but judgement will be needed when assessing the modelling results. It is likely that permits set on the basis of total metal only will be conservative. Provision of dissolved data will mean that the assessment is more robust and limits will only be set where necessary.

3.75 And finally, it was unreasonable because it requires at least 12 samples to be provided and it covers both effluent quality and upstream (background) watercourse quality.

**Our response:** We require at least 12 samples to be taken of effluent quality, to provide the confidence needed in using the data for screening and modelling. This is explained in our guidance. Upstream concentrations can be estimated or assumed if necessary. However, operators may wish to obtain a more accurate understanding of these background concentrations to enable a more robust assessment. We will only set limits where necessary.

3.76 One water company said its staff are not trained to collect watercourse samples and therefore cannot be deemed competent to collect reliable and representative samples.

**Our response:** We expect companies to develop procedures and their staff to ensure they have the competence necessary to deliver this option. Our resources - such as

Operational Instructions - can be made available to any company to use as reference documents for this.

3.77 The same water company added that in order to obtain these samples its staff will require specialist training (arguably by us). Specialist training will bring them up to the appropriate level of competency and ensure their health, safety and wellbeing are not compromised in any manner.

**Our response:** We expect companies to use their own health and safety management systems and risk assessment procedures to ensure the health, safety and wellbeing of their staff. Our procedures can be made available to companies to help them do this.

3.78 The water company expressed the view that it believes we are the guardians of the water environment upstream of the company's discharge. Hence we should be responsible for obtaining upstream water quality data.

**Our response:** We carry out the monitoring required to protect the environment, but not upstream of every proposed or existing discharge. Obtaining representative data to support an application will often be a benefit to the operator. If an applicant does not choose this option then assumptions can be made about upstream quality. Such assumptions may result in a more precautionary approach to permitting.

3.79 Finally, the water company stated it does not have the legal right to enter private land to obtain water course samples in support of the H1 assessment.

**Our response:** We would encourage companies to engage with landowners so that a right to access land to take samples may be found. Alternatively, samples may be taken from a bridge. If samples cannot be obtained then the assumptions about upstream water quality as set out in the guidance will be used.

3.80 A trade body found the terminology in annex D1 confusing. It challenged the substances and pollutants which are defined in England and Wales to form the content of the term 'Hazardous Pollutants'.

**Our response:** It is useful to have one term to refer to all the groups of substances, rather than listing all the groups each time. "Hazardous pollutants" was considered to be the clearest and simplest term for refer to these substances. We also considered the term "hazardous substances", but this could not be used as it has a different meaning in the Groundwater Regulations.

3.81 Within page eight referring to the sentence "...where hazardous pollutants are likely to be in a discharge..." a trade body sought guidance on what this means. It suggested a reference to the 'liable to contain' regime on page 45 would help. It also asked how does the phrase on page eight 'likely to be in a discharge' differ from the phrase on page 10 'considered to be present'?

**Our response:** Within our document a link to Section three has been included – this section details how to determine which substances are likely to be in a discharge. The text has been changed to make it clearer – there is no difference between "likely to be in a discharge" and "considered to be present".

3.82 Considering whether a hazardous pollutant may or may not be in a discharge, a trade body felt it was not possible to prove this by measurement. They felt that for an existing or new discharge, the decision should allow reasoned expert judgement, based on knowledge of the process,

**Our response:** We agree that expert judgement could be used in this way. We expect the operator to know what substances are within their discharge and to monitor accordingly.

3.83 A conservation agency thought the previous version of annex D contained a much clearer statement about different standards applied to receiving waters. There was also a link (page seven) to guidance on Habitats Regulations.

**Our response:** We will copy this link across to the new annex D.

3.84 A conservation agency acknowledged in the majority of cases the EQS for hazardous substances will provide an appropriate benchmark for assessing risks to designated sites. However it identified a set of circumstances where consideration of the need for additional risk assessment for particularly sensitive features was needed.

These are listed below:

Consideration of the extent of mixing zones and the acceptable area of impact within designated sites. Considered to differing degrees on pages 21, 27, 29, 59, & 80.

**Our response:** We accept that there may be an area of EQS failure if the EQS is exceeded in the discharge before full mixing takes place. If the discharge is directly to a designated site we will notify the appropriate conservation agency. This has been clarified in the guidance.

The guidance (page 80) refers to consultation in consideration of discharges to TraC waters which are designated under the Habitats Directive. Clarification of Natural England's role and our role in this process.

**Our response:** We consult with the appropriate conservation agency during the permit determination or during pre-application discussions for discharges directly into conservation sites. We take the consultation responses into account when making permitting decisions. This has been clarified in the guidance.

Dosing substances (Aluminium/Iron) (page 33) – consideration of their potential impact on sensitive features vs risks of not managing eutrophication.

**Our response:** Our permitting processes for dosing substances consider these issues and are designed to ensure sensitive features are protected. We have permitting processes and other measures in place to manage the impacts of phosphorus which is one of the causes of eutrophication. We aim to achieve a balance between these two elements of water quality protection.

Data used for screening (page 34) should cross refer to the need for particular criteria to be used in relation to conservation sites (page 27). They understood the screening test for discharges less than EQS is not applied in the case of "conservation areas". In these areas it would be unsafe because of the risk of:

- (a) cumulative impacts, and
- (b) further deterioration at concentrations above EQS.

**Our response:** The procedure for conservation areas has been clarified in the guidance.

Modelling tests (page 53): consideration should be given of any known sensitive species/habitats where application of an EQS may not be sufficiently protective.

**Our response:** Our permitting approach is based on meeting the EQS and ensuring no significant deterioration. We consider this to be sufficiently environmentally protective. This is because EQSs protect all aquatic life and they include safety factors to take into account any uncertainty in toxicity data.

Small watercourses (page 61): where these are designated sites it may not be possible to accept deterioration in cases where BAT is not adequate.

**Our response:** We accept this point and have clarified this in the guidance.

Application of biotic ligand adjustment for metals. Such assessments should take into account measures underway which aim to reduce DOC concentrations. They will increase the potential bioavailability in sites where such action is planned or underway.

**Our response:** Reduced DOC is likely to mean that treatment has been improved which is also likely to mean that the concentration of metals is reduced. Bio available standards may be implemented from 2016 and we will be using them to set permit limits. Changes to DOC can be taken into account when permits are reviewed.

3.85 A conservation agency reflected on its working relationship with us within the Joint Nature and Conservation Council (JNCC), and specifically, revisions to JNCC common standards for river SSSIs and the targets for water quality (and flow) which underpin these. It sought clearer reference to the differences in requirements, particularly for sanitary and nutrient determinands, where designated sites are concerned. Its concerns are listed below:

Relevant pollutants and determinands (page five): the guidance should acknowledge the need in some cases for specific assessment of risks arising from nitrates in discharges in order to meet the requirements of designated sites, including not only TraC waters but also certain N-limited freshwater systems.

**Our response:** We acknowledge the point being made here. Because of the significance of Dissolved Inorganic Nitrogen in TraC waters and Nitrogen-limited freshwater systems we have amended our guidance accordingly.

Page five refers to annex D3 where “details of the various physical and chemical standards against which we assess the impact of a discharge may be found”. However, targets established for water quality for Natura 2000 sites and SSSIs are not provided in annex D3.

**Our response:** The operator should contact us where a discharge is direct to, or could impact on, a designated conservation site, either a Natura 2000 site or SSSI. This will enable us to ensure that correct standards are applied. This is important where local targets have been devised for the protection of such sites, as Natural England will be consulted on the permit application.

Identify Reported and Target Standards (page six): this section stipulates the applicant must contact us to confirm the correct reported and standard targets that apply. The conservation agency suggests that for conservation sites we should add that they will be contacted by us to confirm the targets for designated sites.

**Our response:** We have amended our guidance to include a sentence indicating that we will contact Natural England to confirm the targets for designated conservation sites. This will apply where the discharge is direct to, or could impact upon, a designated conservation site, either a Natura 2000 site or SSSI.

How to achieve 'no deterioration' on page seven. The conservation agency acknowledges that whilst the ideal is for no increase in pollution loads, the guidance permits within class deterioration of up to ten per cent. They advise that this approach would be of concern if applied to designated sites, and especially to sites designated under the Habitats and Birds Directives where it may be difficult to conclude that ten per cent deterioration will have no adverse effect. Deterioration beyond the target water quality objectives for such sites would be the prime consideration rather than deterioration to class boundaries. In addition, the risks from cumulative impacts over a period of time would not be addressed by the proposed approach. For Natura 2000 protected areas, an assessment of the proportionality of costs to benefits helps to ensure the most cost effective approach is taken. However this would not be a valid consideration in determining the need for measures.

**Our response:** Our position on 'no deterioration' is that within-class deterioration is limited as far as practicable. We are not ruling out a permissible deterioration of more than ten per cent. However, where such deterioration is proposed the applicant must demonstrate to us that such deterioration would be appropriate. Page eight states that "If you think that you cannot achieve a permit limit that will allow for ten per cent deterioration or less you must contact us".

The requirements of the biodiversity designation must be considered alongside those of 'no deterioration'. Our guidance, in itself, does not permit the automatic allowance of ten per cent deterioration where other circumstances come into play. We would always look to the most stringent appropriate criteria being used in determining what is acceptable deterioration where there are multiple target standards.

With regard to cumulative impacts the backstop would be not passing the threshold of the most stringent appropriate standard. The suggestion is now that where the Habitats Directive screening thresholds determine that an Appendix 11 would be required, then it halts the self calculation of permit limits.

Discharges with little dilution (page 30): decisions over such discharges should be dependent upon the sensitivity of the receiving small watercourse and its designated site status.

**Our response:** This is addressed in Section 5.5.2 of the guidance; we have added further detail to this section in response to some of the comments received. Where a river target may fail we will look at the site-specific conditions to see if that failure is acceptable for the water body concerned. The sensitivity would be integral to the making of that decision. It would be a decision for us, not the applicant, to make in

consultation with interested parties.

3.86 A conservation agency observed annex D3 lists EQS and other standards we apply, but fails to detail those targets which underpin conservation objectives for conservation sites. Although impractical they felt that reference is needed to the fact that:

- Protected site targets may differ from those listed for determinands in annex D3, especially phosphorus and other sanitary determinands.
- These targets are not included in annex D3 and would need to be confirmed for the water body in question on a case by case basis.

**Our response:** We will contact Natural England to confirm the targets for designated conservation sites. This applies where the discharge is direct to a designated conservation site, either a Natura 2000 site or SSSI, or could potentially impact a conservation site.

3.87 A conservation agency stressed that the annex D Overview document should stress the potential need for more complex modelling. This is particularly relevant where nature conservation sites, sensitive ecological receptors or protected habitats are nearby.

**Our response:** We recognise that there may be a need for more complex modelling in these circumstances, but this is not always the case. Any modelling needed should be appropriate to the particular circumstances. A sentence indicating that appropriate modelling is likely to be needed has been added to the sentence at the bottom of page eight.

3.88 A conservation agency stressed the need for clearer reference to the differences in requirements, particularly for sanitary and nutrient determinands, where designated sites are concerned.

**Our response:** We will add text to the overview section of annex D2 to reflect this need.

**Question 3b:** Do you have any comments on the additional paragraph in annex D1 in the section on estuarine and coastal waters entitled "Screening Limitations"?

### **Summary**

Only three responses were received on this new paragraph to the screening approach for TraC waters.

3.89 A Water company thought Test 1 of Part A was a simple test that was consistent with WFD compliance. However, they thought the justification for not applying the "screening exceptions" was unclear.

**Our response:** We have clarified and revised the text on the screening exceptions and the justification in the annex D1.

3.90 A consultant thought the Screening Exceptions section was unhelpful, as the bulleted examples presented are sufficiently vague to be open to interpretation. This is because they are potentially applicable to a number of circumstances, which leaves the impression "if in doubt proceed to modelling".

**Our response:** The text on the screening exceptions and the justification have been clarified and revised in annex D1.

3.91 The consultant added that Screening Exceptions were not included in the Environment Agency's internal operating instruction 17\_13, even though we had referred to them when undertaking screening assessments of discharges to TraC waters.

**Our response:** Any text on the screening exceptions will be included in the appropriate sections of the annex D1.

**Question 3c:** Do you have any comments on the method for calculating the PEC in annex D1?

## Summary

The availability of upstream background concentrations and our implementation of the 'no deterioration' rule were a common feature in responses to this question. Some responses covered issues such as mixing zones, effective volume flux and naturally occurring background concentrations.

3.92 It was felt by a water company that this test is very conservative and should be limited in its scope to the assessment of discharges from installations.

**Our response:** Test three is bringing installations into line with the approach used for other water discharge activities. It is in line with the no deterioration requirements of the Water Framework Directive. It is important to have a consistent approach regardless of the activity generating the discharge.

3.93 Although offering no comments on the methodology for calculating the PEC, a water company felt the lack of background concentrations was a concern to them. They felt the lack of data and sample points would result in the need to approximate background concentrations. When combined with the lack of river flow meters, resulting calculations would be very conservative.

**Our response:** Information on background concentrations near the point of discharge can be requested from us and data will be provided where available. Section 3.3.3 of annex D1 provides sources of information on upstream water quality and flow. We aim to operate in a fair and transparent manner in licensing the use of our data and information. This we do whilst meeting the various legal obligations that govern access and reuse. There may be a charge. Data Share is one way that we share data and statistical information; it is available via this link [www.geostore.com/environment-agency](http://www.geostore.com/environment-agency). Alternatively, our National Customer Contact Centre can be contacted on 0370 850 6506.

If there are no data, and the discharge is substantial, the operator may need to collect their own data in support of their application.

3.94 Confirmation of the existence of a database containing river and/or TraC water quality data (water hardness, turbidity, water depth, alkalinity etc) was sought by a consultant.

**Our response:** Where we have information and data we endeavour to make it as freely available as possible. We aim to operate in a fair and transparent manner in licensing use of our data and information whilst meeting the various legal obligations that govern access and reuse. There may be a charge. Data Share is one way that we share data and statistical information; it is available via this link [www.geostore.com/environment-agency](http://www.geostore.com/environment-agency). Alternatively, our National Customer Contact Centre can be contacted on 0370 850 6506.

3.95 Will we make upstream river data available to third parties?

**Our response:** Where we have information and data we endeavour to make it as freely available as possible. We aim to operate in a fair and transparent manner in licensing use of our data and information whilst meeting the various legal obligations that govern access and reuse. There may be a charge. Data Share is one way that we share data and statistical information; it is available via this link



[www.geostore.com/environment-agency](http://www.geostore.com/environment-agency). Alternatively, our National Customer Contact Centre can be contacted on 0370 850 6506.

3.96 An industrialist observed that the calculation of Effective Volume Flux (EVF) now includes a value for 'background concentration'. They asked if this data is readily available for TraC waters.

**Our response:** Information on background concentrations near the point of discharge can be requested from us and data will be provided where available. We aim to operate in a fair and transparent manner in licensing use of our data and information whilst meeting the various legal obligations that govern access and reuse. There may be a charge. Data Share is one way that we share data and statistical information; it is available via this link [www.geostore.com/environment-agency](http://www.geostore.com/environment-agency). Alternatively, our National Customer Contact Centre can be contacted on 0370 850 6506.

If there are no data, and the discharge is substantial, the operator may need to collect their own data.

3.97 A consultant asked if guidance was available on how the risks from a surface water discharge to a downstream ecological site should be assessed. Or was a simple assessment of the impact on potentially sensitive sites in the area sufficient.

**Our response:** The guidance ensures compliance with the EQS and limits deterioration within class so downstream ecological sites will be protected. If specific conservation standards exist they will be applied. We hold separate guidance to ensure that these are taken into account when making permitting decisions.

3.98 One consultant asked how far downstream of the discharge should the assessment boundary be drawn for assessing impacts on ecological sites?

**Our response:** We use a range of ecological screening distances dependent on the volume and type of discharge. These range from 50 km to as little as 50 m. We follow a source, pathway, receptor model to identify any potential risks from a discharge, by using a mapping tool. If any ecological receptors such as protected sites, habitats or species are identified we consider these in more detail and liaise with nature conservation advisors. Depending on the site and the species identified we may search downstream to the estuary and upstream to the headwaters, to protect a migratory species. However for the majority of assessments the distances are considerably smaller.

3.99 Querying the situation where a pollutant is not assigned an EQS MAC but does have an EQS AA, a consultant asked if an assessment of the discharge based on EQS AA results in a failure of the H1 screening assessment, is this true failure.

**Our response:** All assessments in the screening and modelling tests compare the relevant calculated quality statistic with the comparable EQS statistic. If there is no MAC EQS, a short term assessment is not required for the majority of discharges. In deriving the EQS values, where a substance has only an AA EQS, compliance with this value was considered protective against short term pollution. The guidance is directed principally at continuous discharges and site-specific advice would be required for intermittent discharges. Section 5.5.3 does suggest that for infrequent discharges, compliance with the MAC EQS would be most appropriate assessment criteria. It also suggests that where no MAC EQS exists the AA EQS should be used in the first instance. Using an AA EQS in these circumstances is conservative and a pass of the screening tests means the discharge is not significant. However a fail does not necessarily mean the discharge is significant, only that a more detailed site specific

assessment needs to be undertaken. This will help us to determine the potential impact.

3.100 If a river is classed as 'good' or 'moderate' then should the corresponding EQS for that water class be utilised rather than the most stringent EQS?

**Our response:** It is taken that the question relates to the broader range of environmental standards, including sanitary parameters, not just WFD priority substances. Surface water will potentially have a number of different objectives (such as WFD sanitary classes, no deterioration, and Habitats directive). Where there are multiple objectives for receiving water, the aim is to protect the most stringent. EQSs do not vary according to the classification of a river. Substances usually have only one or two EQSs standards (an annual average standard and/or a maximum allowable concentration), and these must be complied with in all classifications of water body. A few standards vary according to water hardness. The appropriate standard must always be complied with, irrespective of the other aspects of water chemistry in that water body.

3.101 An explanation of how the Environment Agency will assess the applicability of third party sewage treatment reduction factors (STRFs) was sought by a consultant.

**Our response:** You may submit site-specific STRFs if the operator of the sewage treatment works is prepared to share them. Details of the data source should be provided by the applicant.

3.102 If third party STRFs are used in assessment of a surface water discharge, a consultant asked what supporting evidence would we require before accepting the data?

**Our response:** You should provide a written statement from the provider of the site-specific STRFs explaining the data source and the validity of the values.

3.103 In the absence of river quality data the guidance suggests assuming ten per cent of the EQS in 'clean' watercourses or 50 per cent in polluted water courses. On this basis how would rivers be classed as 'polluted'?

**Our response:** A suitable definition is provided on page 42 of annex D1. If you are aware of upstream inputs of the substance you are assessing, you should assume the upstream concentration is half the EQS. If you are not aware of any inputs, you should assume ten per cent. In practice, the assumptions which you make should not affect the screening or modelling results. Unless you are discharging high concentrations of the substance and/or the dilution of your discharge in the receiving water is very low. This has been clarified in the guidance.

3.104 It was suggested by a consultant that the new screening criteria are too stringent to be effective. They cited using the Q95 river flow, including outliers, total metal concentrations, and using concentrations of substances recorded below the LOD at the LOD. In such a scenario they considered it highly unlikely that all substances will be screened out of the assessment.

**Our response:** Assessments are carried out in two stages - screening and modelling - with substances potentially being screened out as not significant in either stage. Although the assessments are effectively the same in each stage, screening uses conservative assumptions as you indicate, whilst modelling uses more accurate assumptions. The screening phase is not designed to screen out all substances but is

meant to be a coarse screen. This requires minimum effort in data handling to identify substances that are not at concentrations which are liable to cause pollution.

3.105 A consultant suggested it was unclear how Test three would be applied in situations where the background concentration upstream of the discharge exceeded the EQS.

**Our response:** Where upstream EQS is failed then screening Test three can still be undertaken using the failing upstream quality. It will be Test four of screening in these circumstances that will be the deciding test as to whether to pass through to modelling. Test four will only be passed if effluent quality is significantly better than EQS and dilution is low. This means the effluent effectively dilutes the river so that it is no longer at risk of failing EQS. In this case, Test three will also be passed as the difference between PEC and upstream quality will be a negative per cent of EQS. The following text on page 53 of the document explains the approach if the EQS is failed upstream of a discharge:

“If the EQS is already failed in the receiving watercourse upstream of the discharge, then it may still be possible to permit the discharge. Deterioration should be limited to a less than 3 per cent change in EQS, providing this will not prevent the water body achieving good status if all other improvement measures for the water body are implemented. This would be determined by the Environment Agency.”

3.106 A change in the text to section 5.3.1 of annex D1 was proposed by a consultant. They wanted to see the phrase “the concentration relative to the..” inserted before the words EQS in the sentence beginning “Deterioration should be limited...”

**Our response:** This change has been made in the guidance.

3.107 An industrialist observed a change in calculation of the Effective Volume Flux (EVF) when compared to the previous mixing zones guidance. Previously a discharge could be considered as insignificant if the EVF was less than 5 m<sup>3</sup>/s, this has reduced to 3.5 m<sup>3</sup>/s, which could result in fewer discharges being screened out.

**Our response:** The European CIS Guidance on Mixing Zones is guidance and does not set out a mandatory process. Having completed a detailed assessment of the EVF we arrived at the revised figure of up to 3.5 m<sup>3</sup>/s. This is consistent with a mixing zone no greater than 2000 m<sup>3</sup>. This will result in some discharges being referred to detailed modelling where they would not have been if the value of 5 m<sup>3</sup>/s was used. We are comfortable with this, due to the detailed assessment we have undertaken.

3.108 An installation considered the need for upstream background data for Test three. They suggested where these data are not available or representative of the discharge that site-based groundwater and surface water samples from around the site should be used.

**Our response:** Only data that meet the necessary quality assurance protocols could be used in place of upstream monitoring data.

3.109 An installation suggested where background concentrations are naturally occurring the levels upstream should not be taken into account where it naturally exceeds the EQS. They cited the example of metals such as nickel and potassium-derived radioactivity.

**Our response:** annex D does not apply to radioactive substances. The following text is paraphrased from page 53 of the document and explains the approach if the EQS is failed upstream of a discharge:

- If the EQS is already failed in the receiving watercourse upstream of the discharge, then it may still be possible to permit the discharge. Deterioration should be limited to a less than three per cent change in EQS. This is acceptable providing it will not prevent the water body achieving good status if all other improvement measures for the water body are implemented. This would be determined by us.
- Where substances are naturally occurring this approach still needs to be used. Failure of an EQS means that the substance is potentially hazardous and/or toxic to the biota in the receiving environment. In such situations we must do all we can to limit its impact.
- 

3.110 Figure five of annex D1 prompted a question from an installation. They asked if it was possible to calculate annual loads based on total concentrations and dissolved concentrations. This requires having regard to heavier contaminants adhering themselves to suspended load, rather than being dissolved within the water itself.

**Our response:** Total contaminant concentration is used to define the load. It is not known how the contaminant will be partitioned in the receiving waters after it has been discharged. The screening test is intended to be precautionary.

3.111 An installation asked us to explain why we had selected ten per cent as an appropriate percentage of deterioration allowable in a main river.

**Our response:** The ten per cent deterioration criteria is a long standing element of water quality discharge regulation. It ensures headroom is shared fairly between operators and is not consumed by the first operator to discharge a substance into a water body. It also allows us to be aware of and monitor where an EQS may be threatened and take action to prevent EQS failure. Accepting a greater deterioration could result in inadvertently failing the EQS because of data inaccuracies or modelling uncertainty.

3.112 A trade body suggested that the PEC increase of ten per cent of EQS would lead to more modelling than would previously have been the case. Previously screening was with the PEC less than 70 per cent of the EQS. They thought that WFD no deterioration has normally been construed as relating to a change in the WFD status. Yet for the chemical substances considered here their contribution to change the status is linked to the meeting of EQS in a pass/fail way. Hence where there is considerable headroom in concentration terms, the criterion will lead to modelling work and assessment. The output of which will merely confirm that the discharge presents no threat to the EQS. They added this criterion seems more related to our internal 'no deterioration' policy, relating to allocation of remaining headroom.

**Our response:** Ten per cent is the threshold whereby a permit limit is required. However, we have flexibility in what permit limit we set depending on site specific circumstances.

The ten per cent deterioration criteria is a long standing element of water quality discharge regulation and is designed to ensure that headroom is shared fairly between operators and is not taken up entirely by the first operator to discharge a substance into

a water body. This approach also allows us to be aware of and monitor where we have evidence that an EQS may be threatened and take action to prevent EQS failure. This might not be possible were we to accept a greater deterioration which could result in inadvertently failing the EQS because of data inaccuracies or modelling uncertainty.

3.113 A trade body observed that calculation of the PC and PEC are based on Q95 river flow, but CIS Mixing Zones guidance is based on Q90, both using four per cent as a screen. They asked why the difference? In presenting a significantly more stringent screening test than the European version, the H1 criterion would be expected to create additional requirements for more detailed analysis.

**Our response:** The CIS guidance is based on the Q90, but we routinely use the Q95, which is more readily available than the Q90. We have taken a slightly more conservative screening approach to that presented in the CIS guidance.

3.114 It was noticed by a trade body that on page 21 the Environment Agency refers to EU Mixing Zones guidance in context of four per cent PC criterion. They added that EU guidance, however, is based on Q90 and annex D on Q95 and hence is more stringent. They asked why?

**Our response:** The EU Mixing Zones guidance is based on the Q90, but the Agency routinely uses the Q95, which is more readily available than the Q90. We have taken a slightly more conservative screening approach to that presented in the EU Mixing Zones guidance.

3.115 Looking wider the trade body asked 'how are restricted dilution/dispersion characteristics defined in TraC waters?'

**Our response:** We have drawn up a list of sites which we consider are potentially of restricted dilution/dispersion. Applicants should contact us to see if the discharge is to one of these areas.

3.116 Within Phase two modelling for freshwaters, a trade body noticed that Tests 1a & 1b are based on total metals (although the EQS may be set in the dissolved fraction). They argued that Phase two modelling should then be based on the relevant metals fraction.

**Our response:** The EQSs for metals are expressed as dissolved metal concentration, with the exception of zinc, which is currently set as a total in freshwater. For Phase two modelling, some tests use total metal data, some use dissolved. Total metal data are used when assessing the risk of exceeding the EQS downstream of the discharge (Tests 1a & 1b). This is precautionary because we are assuming all metal in the discharge has the potential to enter the dissolved phase downstream of the discharge. This approach enables us to predict how much total metal will partition to the dissolved phase both temporarily and spatially downstream of the discharge. In undertaking this approach we are aware of complications such as changes in receiving water or sediment chemistry and other environmental processes. Bio available standards for some metals have been developed and will replace existing dissolved metal standards once the relevant legislation comes into force. A new approach to metals permitting is being developed to enable us to implement these changes.

3.117 The lack of the use of soil water partition coefficients in the calculation of sediment bound metals concerned one industrialist. They concluded that by taking a maximum analysed total and assuming all is released, we had adopted an overly conservative approach at the screening stage. This resulted in substances requiring modelling that might otherwise not require it.

**Our response:** Total metal data are used when assessing the risk of exceeding the EQS downstream of the discharge (Tests 1a & 1b). This is precautionary because we assume all metal in the discharge has the potential to enter the dissolved phase downstream of the discharge. We use this approach as it is rarely possible for us to predict how much total metal will partition to the dissolved phase both temporarily and spatially downstream of the discharge due to changes in receiving water or sediment chemistry and other environmental processes. We must be confident that substances that are screened out are not going to be liable to cause pollution.

This approach may mean that some substances pass through to the modelling stage rather than being screened out. Modelling uses a combination of dissolved and total data to assess the overall impact on the receiving water, and therefore assesses the likely impact more accurately. Modelling will therefore show that some substances which have not been screened out are not liable to cause pollution, and these substances will not need to be controlled on the permit.

Bio available standards for some metals have been developed and will replace existing dissolved metal standards once the relevant legislation comes into force. A new approach to metals permitting is being developed to enable us to implement these changes.

3.118 Phase two modelling, Test two (UK criterion of no more than ten per cent of headroom) concerned one trade body. They asked how the risk of effluent deterioration is assessed in practice.

**Our response:** The risk of effluent deterioration is assessed using Modelling Test three “risk of effluent quality deteriorating significantly”. This test may be applied to the concentration of a substance being discharged by a trader. We use modelling to determine if discharging at the permitted concentration could potentially be liable to cause pollution. Dosed substances would also be assessed using this test.

3.119 Referring to the term ‘raw data’ a trade body asked for a clear definition of what this means. They presumed it means valid data having undergone basic laboratory QA/QC checks but no use of statistical techniques to detect and remove unrepresentative data. They also asked if raw data will always be biased ‘high’?

**Our response:** “Raw” data have undergone basic laboratory QA checks but have not been “cleaned up”. There is no adjustment of “less than” values or removal of outliers. Raw data will usually be biased “high” as less than values are taken at face value. High outlier values will also bias the data “high”; less commonly, there could be a low outlier value which biases the data “low”. For clarity, a definition of “raw” data has been added to the glossary.

3.120 A trade body asked how data that are below the LOD or LOQ should be treated in the analysis. How is that linked to the expert judgement in ‘liable to contain’?

**Our response:** This is addressed in Section 5.1.3 of the guidance – Adjustment of “less than” values and low results in the data – as follows:  
“.....In addition, sometimes positive values are reported below the LOD e.g. the LOD for a substance may be 10, but the reported value may be 8.8. In this situation the result of 8.8 should be assumed to be accurate and should be retained for modelling. This is not a common situation, and it does not fit well with the definition of liable to contain”. However, where “real” data are measured rather than less than values, they should be used.

3.121 Considering page 20, with an effluent concentration less than ten per cent of EQS, a trade body asked what statistic or characterisation of an effluent is to be used? They added there could be variable or incremental concentration in the effluent.

**Our response:** If the EQS is an annual average, average effluent concentration should be used. If the EQS is a MAC, the maximum effluent concentration should be used. Section three of the guidance gives details on how to generate the data to use in screening. Section 3.3.1 gives information on how to calculate effluent concentrations. Refer to section 2.2 for guidance as to which EQSs need to be included in the screening tests.

3.122 A trade body noticed that on page 20 Test two uses, for example, maximum effluent flow x maximum effluent concentration to determine maximum load. This may substantially over- estimate the maximum load, and so they suggest that the guidance refers to mean load and maximum load. This is the case for TraC waters on page 31.

**Our response:** We will revise the guidance to reflect these suggestions.

**Question 3d:** Do you have comments on the use of the mixing zones approach for calculation of the process contribution for discharges from installations and waste sites to estuarine and coastal waters (salt water)?

## Summary

Responses to this question focused on the definition of effective volume flux and the assessment of large discharges from power stations.

3.123 Considering the assessment of discharges into TraC waters, a consultant asked which software models can be used for TraC 'simple modelling'?

**Our response:** There are many models of differing complexities which can be used to undertake hydrodynamic and water quality modelling in TraC waters. The model chosen should be fit-for-purpose and suited to the task. We can give advice and approve the use of specific models on a site-specific basis.

3.124 Clarity was sought by an industrialist over the need for MCERTS flow data. They asked what does it mean if flow data used to obtain maximum and mean daily volumes over the last three years were not from an MCERTS accredited source?

**Our response:** Flow data can be unreliable, and the MCERTS scheme is designed to give greater confidence in the accuracy and validity of the data. Where the flow monitoring equipment is not MCERTS certified, it is important that extra efforts should be made to validate it. This could involve plotting the data, analysing it for trends, looking for step changes and making a judgement as to the validity of the data.

3.125 A trade body posed an interesting power station scenario. An effluent stream from a sub process meeting BAT was routed to discharge via the site cooling water system. They suggested this should not necessarily trigger a need for modelling with respect to each of the components of the discharge introduced via the sub process. Modelling of new plant cooling water systems apart, there should be no requirement to necessarily consider other substances introduced by non cooling water processes.

**Our response:** Modelling each component of the discharge from a sub process meeting BAT, routed to discharge via the site cooling water system would not be necessary. We are considering that power stations with once-through or partially once-through cooling water systems should be a special case. In such cases the existing H1 screening method is not appropriate to the process waste streams which are routed into the cooling water systems. We are reviewing our methodology for assessing modelling requirements under these circumstances and are discussing this with relevant industry sectors. However, it is expected that modelling will always be required for the temperature and total residual oxidant in the cooling water discharge. This is because the EQSs for these will be exceeded, resulting in the need for a mixing zone assessment for these pollutants.

3.126 Citing Test three on page 28, a trade body found the criterion for limited dilution/dispersion unclear. Does it relate to either:

- limited capacity for mixing in the vicinity of the outfall, or
- longer-term considerations related to the potential for the occurrence of a non-trivial, long term effluent field in continuous operation.

They felt it was not clear how the classification of limited dilution/dispersion links to the scale of the discharge under consideration. They thought it surely should.



**Our response:** The criteria for limited dilution/dispersion links to both:

- the potential for limited capacity for mixing in the vicinity of the outfall, and
- to considerations related to the occurrence of a non-trivial long-term effluent field in continuous operation.

There is a linkage between the potential modelling required and the scale of the discharge under consideration. However, failure of Test three will cause the operator to discuss with us:

- what modelling is required, and
- what is appropriate for the scale of the discharge and the sensitivity of the receiving waters?

3.127 Looking at Test five, a trade body found the concept of Effective Volume Flux (EVF) less than transparent. They suggested it may be easier to re-cast it as a limit on load. Where the EVF was  $3.5 \text{ m}^3/\text{s}$  the condition was equivalent to an allowable load  $m$  [kg/s] of  $3.5 [\text{m}^3/\text{s}] * (\text{EQS}-\text{BC}) [\text{kg}/\text{m}^3]$ , where BC is Background Concentration.

Taking the screenable mixing zone of  $2000 \text{ m}^3$  they suggested it may be helpful to include this as an alternative criterion. They suggested simple mixing models like CORMIX (used widely for industrial discharges) may be interpreted to provide this volume. It takes account not only of the basic receiving water geometry, but also the mixing induced by the outfall and buoyancy of the discharge.

**Our response:** EVF is not simply a limit on load; it is a load relative to the EQS. This is an important difference.

The proposal to model the discharge with Cormix, to check if the mixing zone is less than or greater than  $2000 \text{ m}^3$ , seems to defeat the object of the EVF screen. The EVF screen is in place to avoid the use of models. If the applicant wishes, they can go straight to modelling and miss out the screening stage.

$2000 \text{ m}^3$  is very small in the context of some TraC waters and failure of the screening test five is only a signal to undertake detailed modelling. Following modelling, we may accept a mixing zone very much larger than  $2000 \text{ m}^3$ .

3.128 The technical WFD definition of water body featured in a query from a trade body. Excluding substances abstracted and returned for once-through cooled systems they sought clarification that in this context, water body is used in a generic way. Also it does not refer to the technical WFD definition of water body. Their scenario was a once-through cooled plant abstracting from one WFD water body and discharging to a different WFD water body. However the two WFD water bodies have the same physical extent.

**Our response:** This is covered in section 3.1 of annex D.

3.129 A trade body felt it inappropriate that the risk to EQS should be based solely on regarding total metal as if it were dissolved. Accepting this precautionary approach for:

- metals known to partition to suspended solids, and
- with the EQS set in the dissolved phase

they thought such a coarse assumption was incompatible with detailed Phase two modelling.

**Our response:** It is accepted that this is a precautionary approach but this is not a new approach. We have practiced for many years assessment of the risk a discharge poses to water quality and EQS using total metal discharge data. Metals with a strong affinity to partition with solids in the effluent will predominantly be removed with those solids during the effluent treatment process. However, we accept that metals attached to suspended solids will be carried over in the discharge.

3.130 The wording of the TraC waters methodology prompted a trade body to conclude the implied assumptions about outfalls are not valid for power station discharges. They added that initial dilution is defined in the guidance as referring to dilution occurring in the early jet/plume phase of a buoyant discharge. This assumes the discharge is subsurface, which is not necessarily the case at power stations. They thought the initial dilution concept could usefully be defined as the mixing occurring in the vicinity of the outfall. But this was prior to locations at which PC and PEC are required to be evaluated. They identified the key term as 'vicinity' and suggested this should be capable of being determined on a site-specific basis. They thought this was particularly relevant to power sector discharges which are often cited on very large water bodies.

**Our response:** Initial dilution as we define it is not really relevant to cooling water discharges. Again, we propose that power station discharges are a special case, and detailed modelling for temperature and TRO should be the default position for these discharges. For process streams discharged into the cooling water system, the methodology for assessing modelling requirements is being reviewed. See response to 3.125.

3.131 Use of the word 'reflects' on page 59 of annex D1 was welcomed by a trade body. Specifically in the context of permit limits, reflecting modelling assumptions, and in the case where modelling has demonstrated that a mixing zone will be acceptable. They thought it inappropriate for permit limits to simply 'echo' the specific modelling case(s) submitted. They suggested a modelling case might stand proxy for a number of real world situations. And moreover they thought permit limits should take account of the real world fluctuations which cannot readily be included in practical modelling. They suggested modifying the text to 'the precise form and detail of the permit limits should be agreed through detailed discussion with the applicant'.

**Our response:** We discuss numeric limits with the applicant as early as possible during permit determination, as detailed discussions may be required. There is also a final operator review before a permit is issued. This provides an opportunity to resolve any factual errors (e.g. addresses, NGRs) rather than asking the operator whether they agree with our conditions.

3.132 A trade association did not see use of the 'river needs' approach for limiting new discharges as appropriate in all circumstances in all water bodies. They saw no reason why a new installation discharge, providing it meets BAT, should not be permitted with a PC greater than ten per cent of EQS. This would be on a case specific basis. It would only apply where the new discharge does not threaten compliance of the receiving water body. This means the resulting PEC is compliant with the EQS beyond an acceptable mixing zone.

**Our response:** Where PEC is greater than ten per cent of the EQS above the background concentration, the discharge is significant and should be subject to detailed modelling. Once detailed modelling has been completed, if there is more than ten per cent deterioration against the EQS, a permit limit will be required. However, we

have some flexibility when setting permit limits. Depending on the individual circumstances and receiving water quality; the limit can be set to allow more than ten per cent deterioration in some situations. This approach is consistent with our no-deterioration policy.

Section 6.3.3.1 of annex D1 contains a table which shows the various options when setting a permit limit. Where a discharge from an installation into surface water meets BAT, the discharge may be acceptable. Even if the discharge caused more than ten per cent deterioration, providing it did not threaten overall compliance with the EQS in the receiving water. However, if the EQS is threatened and/or the deterioration caused by the discharge is substantial, we may apply a permit limit tighter than BAT. If no BAT limit is defined for the substance, we would determine an appropriate limit consistent with BAT.

3.133 Following on from the previous point, the trade association looked to us to modify the current text in some circumstances such as where there is little likelihood of other dischargers wishing to develop new plant that would add significantly to the existing installation contributions. They also sought clarification if this proposal is 'allowed' in the option hierarchy in the table on page 78 of annex D1.

**Our response:** Yes, option one within the specified hierarchy allows us to accept a justified discharge which delivers more than ten per cent deterioration of EQS in the receiving water. This is providing the discharge is compliant with BAT and does not cause a failure of the EQS downstream of the discharge. However, in line with WFD we need to minimise the deterioration in the watercourse irrespective of the number of discharges.

3.134 Considering text on page 68, a trade body welcomed the presumption that where emissions are insignificant, emission limits corresponding to the use of BAT should not be applied routinely.

**Our response:** If the quantity of a substance released from an installation is insignificant the IED does not require us to set an emission limit in the permit. However, H1 defines insignificance in terms of environmental impact and so there currently is no direct correlation between IED derogations and insignificance in H1.

3.135 Referring to modelling guidance applying to TraC waters on page 80, a trade body welcomed reference to the CIS Mixing Zone Guidance. Whilst they found the use of dilution mapping helpful for substances which behave conservatively, They thought that for some substances discharged from power plant falling into the 'hazardous' substances category the use of dilution mapping could be unduly precautionary. For example, emissions resulting from the chemical control of biofouling. They requested the insertion of additional text to support the basis for modelling for permit limit setting. The modelling should include appropriate characterisation of any decay or loss processes occurring over relevant time and distance scales.

**Our response:** We have included a sentence in the guidance to cover this.

3.136 The provision for explanatory information being provided to water companies regarding draft permit limits were noted on page 82 by a trade body. To enable a response to draft permit limits within the 10 day period they agreed that appropriate explanatory material should be provided. However, for TraC waters, the list on page 82 was considered insufficient and they suggested the current wording should be generalised. They cited a scenario where different receptors may be limiting on different substances for the same discharge.

**Our response:** Text has been added to this page to cover discharges to TraC water. This states that for discharges to TraC waters, the applicant will have been involved with, and probably provided, most of the information supporting the application. The derivation of any permit limits should therefore be clear. However, if the applicant is uncertain about how a limit for a substance has been determined, clarification of this can be requested.

3.137 A trade body noticed the discussion on biota standards on page 84 appeared to predate the Directive 2013/39/EU which (despite its publication in summer 2013) gives Member States until 14th September 2015 to transpose into law. Regarding the transposition, they sought reference to the inevitable direction including Footnote 12 of the Directive (relating to the choice of biota). They noted that biota standards have been set in a wider range of substances than suggested currently including polycyclic aromatic Hydrocarbons (PAH) (including Benzo (A) Pyrene).

**Our response:** The consultation was launched in October 2013, after the publication of the amendments (Directive 2013/39/EU) to the Environmental Quality Standards Directive that were published in August 2013. These amendments include an increased number of substances to which biota standards apply. However, the new and revised standards in Directive 2013/39/EU will not apply until they are transposed into UK legislation. Directions to do this are not yet in place, but are expected by September 2015. The Directions are also expected to incorporate changes to UK Specific Pollutants, following UKTAG recommendations that were made in November 2013.

Once Directions are issued, further amendments to elements of annex D will be required. We will be using the updated standard for planning purposes in advance of the expected Directions.

**Question 3e:** Does the worked example of the new screening calculations and modelling methodology (in annex D1, appendix A) explain the process clearly? If not how could it be improved?

## Summary

The worked example was generally supported, subject to a few points of clarification.

3.138 The worked example served only to illustrate the inconsistency of the 'no deterioration' policy, so said a water company. The example implied the data set applied to an existing discharge which failed the deterioration test and therefore ended with a numeric limit. And they questioned if this limit would be more stringent than measured data?

**Our response:** The example demonstrates that a limit would be required. Limits are discharge-specific and dependent on local circumstances such as the level of dilution provided by the receiving watercourse and existing river quality. The annex D methodology will assess whether existing discharges without limits will need to be controlled by a limit.

3.139 An industrialist noted that although the worked example generally presented a clear explanation they thought an error had been made in the calculation of the PC on page 94. Although the error did not change the conclusion they thought it may serve to confuse users who were trying to follow it through.

**Our response:** Thank you - this mistake has been rectified.

3.140 Another industrialist thought that whilst the worked examples on page 23 were clear, the use of parameters 'S' and 'K' without explanation rendered section six unclear. They questioned whether 'K' relates to discharge or partition coefficients?

**Our response:** 'K' is the SD Factor which is defined in the glossary at the end of section 6.3.1 of annex D1. When multiplied by the standard deviation of data in the HiTail and antilogged, it gives the ratio between two specific percentiles for a hazardous pollutant. 'K' is an empirically derived statistical factor for water company sewage treatment works effluent and is not related to partition coefficients.

3.141 A water company noted that on page 95 reference is made to Tests 3b and 3a and that these test should be named numerically to avoid confusion.

**Our response:** We have amended this in the guidance

## 2.4 Annex F – Odour dispersion factors

**Question 4a:** Do you think the screening criterion in annex F is appropriate for odour assessments or could you justify an alternative?

### Summary

Respondents sought to broaden the scope of this question to include the assessment of odours in the widest sense. Having considered the points raised and suggestions made we have chosen to hold back on launching the new odour screening tool until we can confirm its role in our permitting of potentially odorous point sources.

4.1 A water company stated that processes involving septic sewage and septic sludge are indicative examples of highly offensive odours. However, they sought to operate a source of potentially highly offensive odours to a less stringent benchmark, by demonstrating that their treatment /abatement technology changed the nature of the odour and the quantity of emissions released. They cited a bio-filter, which they suggested should enable the odour benchmark to be relaxed from 1.5 OU/m<sup>3</sup> to 3 OU/m<sup>3</sup>.

**Our response:** The odour benchmarks are based on epidemiological studies which demonstrate that there is a clear relationship between hedonic tone and the dose-response relationship<sup>4</sup>. If there is evidence to demonstrate that treatment through a biofilter would alter the hedonic tone of an offensive odour, then in some cases, an alternative benchmark may be considered. This would be subject to evidence provided that full treatment of all odour emissions through an optimally operating biofilter. Management to ensure its optimal performance would need to be included in an odour management plan (OMP).

4.2 It was stated by a consultant that in the first paragraph on page 22 of annex F there are some very dangerous leaps of faith from one hour mean concentrations of odours to complaint levels. Making reference to the 100 percentile of one hour means the consultant advised there could be times when an instantaneous odour concentration was many times above the defined benchmark, whilst during the remainder of the hour there was no release. Averaged over an hour the odour benchmark would not be exceeded in the local environment, but the release occurring over a matter of a few minutes could cause complaints. The response closed by advising us not to attempt to comment on what achievement of these benchmarks will or will not mean in terms of complaints.

**Our response:** We acknowledge in H4 that a rapidly fluctuating odour is more likely to be noticed than a steady background odour at a low concentration. And the odour screening tool, being designed as it is for assessment of continuous releases and not for instantaneous peaks, could not reflect such variation in source term. However, we will review our text in annex F relating to odour benchmarks and complaints, particularly with reference to 98 percentiles.

4.3 Expanding on the relationship between odour benchmarks and likely complaints, the consultant highlighted what was described as a misconception that if the 98 percentile one hour mean concentration is below 1OU/m<sup>3</sup> then it will not be detected; or

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<sup>4</sup> EA R&D report Technical Report PR4-095/TR

that odour will only be detected in the remaining 2per cent of the year. It added “both are wrong”.

**Our response:** With reference to the standard method given in BSEN 13725:2003 on olfactometry it is clear that 1OUe /m<sup>3</sup> is the point of odour detection. In our consultation we made no reference to odour concentrations below this level. We believe that odour modelling is useful because we can associate modelled exposure levels with annoyance, which is something we would want to avoid.

4.4 The applicability of the Odour Screening tool to some aspects of the EPR activities concerned one water company. They stated their opinion that H4 does not apply to UWWTD facilities (unless they are subject to the IED/IPPC), to standalone water discharges, groundwater authorisations or any other activity which is not subject to an odour condition in a permit.

**Our response:** This is correct and reflects H4. We will clarify annex F to make this clear.

4.5 It was observed by a water company that Table references at the beginning of Appendix D need expanding to include Table 3.2.

**Our response:** Agreed, we have amended annex F post consultation.

4.6 Clarity was sought by a water company concerning the level of offensiveness that would be assigned to the outlet of odour control units. For example: 1.5, 3 or 6 OUe/m<sup>3</sup>.

**Our response:** These benchmark levels are consistent with specific guidance included in Appendix 3 of our horizontal guidance note H4.

4.7 Considering that to use the Odour Screening Tool required measurement (or estimation) of the odour concentration in the point source release, one water company highlighted what it considered to be the limitations of this tool because of the need to sample hot gases on occasions.

**Our response:** Standard methods for the measurement of odours are included within H4 and we recommend the use of those methods, subject to their limitations.

4.8 A water company suggested that it would be sensible for the Odour Screening Tool to include a pre-screening stage to establish where it is clear that odours will have an insignificant impact, thereby avoiding the unnecessary cost of sampling to prove the case.

**Our response:** We would have to carry out further work to identify activities which may pass through a pre-screening stage and avoid the need for odour sampling. Coupled with a need to review some of the dispersion factors included in our consultation (because some modelling parameters have changed since the factors were developed) leads us to conclude the Odour Screening Tool should not be published until this further work is completed. In contrast, H4 Appendix three includes a list of activities which are known to be a source of odorous emissions.

4.9 There is need for clarification on the use of effective height within the Odour Screening Tool. A water company asked ‘Is the effective height for odour assessments the same as in Appendix D of annex F, or is the effective height the actual stack height as given in the worked example on page 22?’

**Our response:** The effective height for odour assessments is the same as given for air quality assessments in Appendix D of annex F.

4.10 A consultant stated it is not correct to assume a direct relationship between one hour mean odour impact concentrations and C98 benchmarks, as the benchmarks are based on a number of odour exposure events rather than one individual exposure.

**Our response:** Our screening methodology was constructed using the ADMS modelling system, incorporating a conservative approach with no plume rise within a flat terrain. Within these constraints, predictions in exceedance of the appropriate benchmark indicate the need for a detailed assessment. A detailed assessment (modelling) of odorous releases, which includes a sensitivity analysis of those factors which if varied could influence the prediction, can be used to predict the likely impact off site. Such predictions in exceedance of the appropriate benchmark indicate unacceptable pollution.

4.11 The applicability of 98 percentile of hourly average odour concentrations prompted a water company to suggest that such standards should only apply where an individual's exposure is likely to occur for prolonged periods of time, such as at a residential property. It added that 'where exposure is more transient (roads or footpaths) the direct application of such criteria should be treated with caution as the benefits of intervention could be vastly overestimated.'

**Our response:** We have said the 98 percentile predicted odour concentrations relate to our consideration of routine continuous releases. However, using this approach, there could still be times when the odour is detected at a level above the benchmark. This event could coincide with a person walking along a road or footpath near your installation. As the operator if you receive odorous complaints you should review your odour management plan to identify any modifications to your operations that may be necessary.

4.12 A consultant expressed the view that the odour screening tool must not refer to short term impacts against long term benchmarks. Adding they should be considered in the same way as other EALs, i.e. have a different dispersion factor, a higher significance benchmark (ten per cent) but also a higher EAL. Although they were not able to suggest what a suitable one hour EAL benchmark should be, they did think that having a long term EAL or benchmark would bring it in line with arsenic and B[a]P so this would not be unusual.

**Our response:** Historically, we have used occupational exposure limits (OELs) as a basis for deriving environmental assessment levels (EALs). However, we believe OELs are not suitable for determining a level of annoyance since they are derived from health-related data. And the transposition of these limits from workplace to community is not straightforward. We believe the odour benchmark levels are designed for use with the 98 percentile of hourly averages.

4.13 A trade association commented that whilst the odour screening approach being based on modelling 98 percentiles of hourly values is quite well established, it is only one of a number of approaches to assess odour impacts, none of which is foolproof.

**Our response:** As the trade association acknowledges we have built our odour dispersion screening tool on an established methodology. In common with all H1 assessments a pollutant release rate is required. Within the field of odour assessments the monitoring of releases, such that those results are truly representative of plant operation, are crucial to the predicted outcomes. In the wider sense the management



of odorous releases requires a holistic approach incorporating permit conditions and an odour management plan.

4.14 Two water companies found an error in the calculation of the worked example.

**Our response:** Agreed, if published in its current form we will correct this in the revised annex F.

4.15 It was assumed by a water company that processes which contribute the levels of odour which are given as benchmarks within annex F are listed elsewhere in the guidance, but they felt it would also be useful to list them within the Odour section in annex F.

**Our response:** If published in its current form we will modify annex F to give indication of the types of activity that may give rise to the categories of odours we are considering.

4.16 Considering the modelling of odorous emissions from landfill sites, a consultant suggested the odour unit (OUe) approach was not appropriate because the chemical constituents of landfill gas, which changes with time, give rise to site specific odours.

**Our response:** We believe that landfill gas is a complex mixture of chemicals which generally hinders the identification of individual species within landfill gas. Hence we would expect the odour unit approach to be used in the assessment of odours from landfill gas.

4.17 An industrialist observed that 'worse case impacts are modelled for receptors beyond 100 metres using a dispersion factor associated with effective release height.' It added that 'these factors have been derived for worse case conditions using a commercially available model and purchased meteorological data, but no details are given.' And a consultant stated that the 'assumptions, input and model set-up used to derive the odour dispersion factors shown in Table 3.2 of the draft guidance should be clearly stated (in an appendix if necessary) for reasons of transparency and so that other practitioners can replicate the derivations if desired.'

**Our response:** Hourly sequential meteorological data was purchased from the Meteorological Office in 2008 for their 34 operating stations located across England and Wales. From that list 13 stations were selected. Five years of meteorological data from 2003 to 2007 inclusive was used. Other dispersion modelling parameters were entered into ADMS 4.1. They included a range of surface roughness values (both at the meteorological station and the dispersion site) and a variety of stack heights. Flat terrain was used. ADMS recommends terrain effects only where the gradient is greater than one in 10.

The model delivered the maximum ground level concentration for a unit odour release, adjusted to give an output in odour units per cubic metre. The size of the modelling output domain was adjusted to ensure the maximum value was captured. The size of the output grid was managed subject to the AQMAU recommendations on stack height, particularly for short term assessments. Both the 98 percentile and 100 percentile of hourly averages were generated. The modelling output files were interrogated to identify the maximum ground level concentration at a minimum distance of 100 metres from the source. This was deemed consistent with the site boundary for sites which are likely to produce odorous emissions. The maximum values were then used as dispersion factors for the respective effective heights.

4.18 It was noticed by a consultant that the maximum short term dispersion factors in Table 3.2 for odour are different to the maximum 1hr mean dispersion factors in Table 3.1 and they asked why? For reasons of transparency they thought the derivation of the odour dispersion factors should be clearly stated.

**Our response:** Air quality dispersion factors were developed using statistical meteorological data, because at the time (2002) that was the only meteorological data we possessed. With the purchase of hourly sequential meteorological data in 2008 we have been able to increase the accuracy of our predictions. However we acknowledge that this generates some discrepancy between the two data sets. We have not updated the earlier dataset because these factors are used for screening rather than detailed modelling.

4.19 A trade association suggested that although the proposed odour screening tool uses a similar methodology to the short term air quality screening assessment, the odour screening tool should be introduced on a trial basis only. They added that during the trial the tool should be validated against the incidence of complaints or some other monitoring criterion. And that recognised approaches for detailed assessment of routine and incident related odour releases should also be identified.

**Our response:** The dispersion model we used to generate these factors has been subject to validation as part of its development. However some of the modelling parameters we used may have changed which would affect the value of our dispersion parameters. So we need to review the generation of these parameters before we publish them for use in screening activities.

4.20 Developing the point further, the trade association suggested that experience should be developed in the use of the odour screening tool for point sources before its application to other sources.

**Our response:** We support this view. Once developed further the Odour Screening tool will be limited to point source releases.

4.21 One water company sought guidance on when the new Odour Screening Tool should be used. They asked if it was mandatory for screening.

**Our response:** We are refraining from publishing the tool until such time as further work is completed. Hence the tool will not be available for use in the immediate future. It is not until new guidance is published which contains the tool that we would require its use in permit applications.

4.22 Additionally, the water company asked should the Odour Screening tool be used with pressure relief systems. They suggested that previously they had used a qualitative, risk-based assessment approach to evaluate if detailed odour assessment is required, which in most cases was deemed sufficient, but they do not say by whom.

**Our response:** The tool requires input of a quantified odour release rate and this may not be possible for pressure relief systems. If the release can be quantified the 100 percentile dispersion factor could be used to produce a conservative estimate of the predicted odour concentration at ground level.

4.23 Noting that screening with 98 percentiles could result in up to 175 hours when the benchmark could be exceeded, a trade association suggested that using the 100 percentiles provided a greater level of confidence in avoiding complaints.

**Our response:** We agree, subject to the validity of the sampling regime used to determine the odour release rate.

**Question 4b:** Would you like to see Odour Dispersion Factors provided for other aspects of EPR regulation in addition to point sources? If so, please explain why.

### Summary

Responses focused on broadening the scope of odour dispersion factors to include area and volume sources.

4.24 A number of respondents suggested that odour dispersion factors for non-point sources would be useful. A water company declared the majority of emissions from their conditioning sites were from diffuse sources, and their sewage treatment sites where the majority of emissions arise from open tanks and channels which have large surface areas.

**Our response:** We acknowledge this suggestion as an area for future development. However, the variability in the release of odours from these sources and the degree to which we currently may quantify their release makes the development of dispersion factors for such sources unlikely in the short term.

4.25 A trade association noted that there does not appear to be a screening capability for area and volume sources which it felt are often more of a concern for odour impacts.

**Our response:** Use of the Odour Screening tool requires the inputting of a source term, either through measurement or estimation. Hence the opportunities for using the tool with non-point sources appear limited.

## 2.5 The revised Annex K (2013)

Question 5a: Does the revised document still work for what we previously would have called 'BAT assessments'? If not, please tell us where improvements are needed.

### Summary

Responses were received from UK trade associations representing the refineries, chemicals and power generation sectors. Responses referred to the content and presentation of annex K and the need for a BAT assessment and construction of a derogation request within the same document. The economic aspects of derogations were highlighted and concern was raised at our proposed use of the Treasury's Green Book with its associated discount rates.

5.1 A Water company welcomed the opportunity for operators to put forward cases for derogation from BAT. Particularly where they thought the BREF was designed for a different industry and a 'closest fit' approach was not appropriate. They cited the example of the Total VOC benchmark value in Landfill Gas Technical Guidance Note 08 (LFTGN08), where a limit of 1000mg/m<sup>3</sup> is quoted. But they suggested its relevance to CHP engines combusting biogas should first be subjected to research before being implemented in permitting.

**Our response:** We anticipate a Waste Water Treatment BREF being published in 2017. So water companies should provide evidence to influence the content of the BREF during its development. The UK Representative on each BREF is available on request from the Head of Industrial Pollution Control at DEFRA.

5.2 When calculating costs associated with:

- an operation,
- site preparation, and
- decommissioning of an activity

(where the operator is applying for derogation), a water company expressed their understanding that this information should be calculated and submitted for each option being considered. If submitted by the operator they asked on what basis we will perform the comparison to costs in considering the case for derogation.

**Our response:** The IED permit review process is triggered by us issuing a Regulation 60 Notice to permit holders. If the operator's response identifies BAT AELs with which they cannot comply, then we will seek supporting information in considering the case for derogation. The basis on which derogation may be sought is given in annex K. It is the operator's duty to demonstrate that achieving the BAT AEL will result in disproportionately high costs for the operator compared to other installations across the sector. We have piloted a methodology for assessing derogation requests during 2014. We have made changes to annex K to make the factors being considered in the assessment clearer.

5.3 A trade association suggested it would be misleading to publish a revised version of annex K before an agreed methodology was developed. The methodology should explain how we would determine the case for derogation.

**Our response:** We piloted a methodology for assessing derogation requests during 2014. It is necessary to provide guidance to applicants that need to make derogation requests as soon as we are able. Annex K has been updated to reflect feedback from this pilot and operators.

5.4 In “Making the case for derogation” a water company stated that due to the size of their business they operate a cost model for valuing purposes. They suggested it would improve the process if ‘cost model valuations’ were accepted as a suitable alternative to explicit quotations from equipment suppliers.

**Our response:** Cost model valuations will be accepted, but the variability of the capex and opex (e.g. showing the respective percentile) will have to be provided. It should show the likely variation of costs at the plant which is the subject of the derogation application.

5.5 Public Health officials in England asked that we provide assurance that the process of granting any BAT - AEL derogation appropriately considers the potential impact on public health.

**Our response:** In making a case for derogation the operator will be required to provide an assessment of the impact, both short and long term, of operating their plant:

- in accordance with the BAT Conclusions, and
- at some lesser standard which is the subject of their derogation.

They will need to consider possible impacts on human health when demonstrating that the cost of achieving the BAT AEL is disproportionate to the benefits. No permits will be issued where the emissions from the installation cause significant pollution.

5.6 A trade association made a series of comments on the content and presentation of annex K and these are listed below:

Page three – Issue 2.0 is dated December 2011, but this is given as August 2011 in the Consultation document Summary Table.

Page four, first bullet – the guidance refers to ‘a BAT which is not that prescribed by the BAT conclusions’. BAT conclusions documents do not prescribe any particular technique or specific technology (see, for example, page two of the BAT conclusions document for Iron and Steel production, where it is stated that “The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive”).

Page four, third bullet – the guidance refers to “a later date than set out in the BAT Conclusions”. BAT conclusions documents do not set out timescales for compliance; the timescales come from IED Article 21(3) and are relative to the publication date of the BAT conclusions document. This bullet point should be revised.

Page four, last line before bullet points at the bottom of the page – the word “therefore” is misspelled.

Page four, penultimate bullet – the guidance refers to “the total cost of complying with the BAT AEL or EQS”. This is the only reference in the document to an EQS and should be removed unless additional text is included to describe how compliance with an EQS (bearing in mind that in most cases the installation under consideration will

only contribute a proportion of the overall ambient concentrations) should be taken into account.

**Our response:** Our current guidance is limited to cases of derogation where the BAT AEL relates to air emissions. We are hopeful of extending our guidance to include discharges and their relationship to an EQS in a later development of our derogation methodology.

Page five, last paragraph there is an apostrophe missing from the word “projects”.

Page five last paragraph – the guidance quotes the Treasury’s Green Book as stating that “costs and benefits should be expressed in ‘real’ terms as opposite to the ‘normal’ ones.” This is derived from paragraph 5.42 of the Green Book, but it would be clearer to use the alternative language from that paragraph and rewrite this as “costs and benefits should be expressed in today’s prices as opposed to future prices.”

Page six, paragraph beginning “Direct costs tend to..” What is the relevance in the last sentence of quoting DECC guidance on the future costs of energy generation? This is not the same as the future cost of purchasing energy. The guidance may be directly relevant to the energy generation sector, but is not generally applicable to other users of annex K. If there is a specific element of the DECC guidance that is relevant to all users of annex K, this should be highlighted – if not the reference should be removed.

Pages six & seven. On page six, one sentence reads “Present your capital costs as in Table one in Appendix one” and another reads “Operating costs should be presented as in Table two in Appendix one”, this implies these forms are compulsory. The first paragraph on page seven concludes with “The templates given in Appendix one can help you do this and are based on a general format but you may use a format more appropriate for your sector if you wish”, so clearly these Tables are not compulsory. The two sentences on page six should be removed or revised.

**Our response:** H1 is a guidance document to assist operators in making an application for a permit. As guidance it needs to balance the varying needs of operators, some of which prefer specific instructions on how to best present information.

Page seven, first paragraph – the guidance suggests that cost data included in the relevant BREF should be used to support a case that costs for a particular installation would be higher than for a typical installation within the sector. In many instances, cost data is either missing or the basis for any data included is unclear. It should be recognised that the ideal of comparing to cost data from the BREF will not always be possible.

**Our response:** Cost data within the BREF will be the starting point for our consideration of the operator’s proposals. Their disproportionately high costs of meeting the new standard should be compared to the benefits of operating at the new standard. Their explanation of disproportionately high costs will then be compared to other installations in the sector. If the BREF is weak on this point we will consider the information supplied by the operator on a case by case basis with reference to any other relevant data.

Page seven, last paragraph – issue 2.0 of annex K quoted an indicative range of six – 12 per cent for the discount rate. The range has been removed from the October 2013 version, and so the phrase “especially if it is above this range” (copied from the previous version) is now meaningless. Either this phrase should also be removed, or the indicative range restored.

**Our response:** We are working to the Treasury's Green Book and so the phrase will be removed.

Page seven, last paragraph – the word “Treasury” is misspelled.

Page seven, last paragraph – it is stated that the appropriate discount rate “would usually reflect the cost of capital”, but it is then recommended that the Treasury's Green Book is used for guidance regarding appropriate discount rates.

The Green Book relates to appraisal of the costs and benefits of spending public funds by Government departments and executive agencies. The discount rate in this case is based on social time preference – i.e. the general preference to receive benefits now, rather than later (see paragraphs 5.48 and 5.49 of the Green Book).

The detailed derivation of the recommended discount rate of 3.5 per cent is set out in annex six of the Green Book. It is based on comparing “utility” at different points in time across generations and involves perceived risk of future catastrophe, individuals' pure time preference, growth per capita consumption and the elasticity of marginal utility of consumption. The calculated Social Time Preference Rate is conceptual, rather than a reflection of real costs of capital.

The revised annex K guidance is intended for operators of industrial processes falling within the scope of the IED, and it is thus unlikely that public funds will be involved. The sources of funds for commercial enterprises will be different from those available to the Government, and costs will be determined by market forces, including the perception of risk in different industrial sectors and for different enterprises. This is fundamentally different to the conceptual Social Time Preference Rate recommended in the Green Book. It is highly unlikely that the real cost of capital for commercial enterprises would be as low as 3.5 per cent.

One of the earlier references in annex K is to a DECC report on Electricity Generation Costs, published in July 2013; this uses a discount rate of ten per cent, which is inconsistent with the discount rate in the Green Book, but presumably reflects a realistic view of the cost of capital to the electricity generation sector.

If the discount rate is to reflect the real costs of capital borne by commercial enterprises, then reference to the Treasury's Green Book is misleading and this should be removed.

**Our response:** We will assess derogation requests from the BAT AELs on the basis set out in Article 15(4) of the IED<sup>5</sup>. We will use HM Treasury's Green Book (HMTGB) discount rate (i.e. 3.5 per cent up to year 30) to discount the costs and benefits submitted by an operator in support of their request for derogation. If the operator's weighted average cost of capital is higher than HMT's GB discount rate, the cost of accessing finance should be added to the analysis as a stream of annual payments. They will be then discounted using HMT's GB discount rate.

Page nine, first paragraph – the guidance refers to the Environment Agency's H1 software tool and the insignificance tests included within it. It does not suggest how a finding that a particular emission may be found to have an insignificant impact should

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<sup>5</sup> 2010/75/EU



be taken into account in the context of a derogation application. Should it be the case that if the environmental impact of a particular emission is found to be insignificant, using the methodologies in the H1 annexes D and F, then no further abatement is required, even if the emission does not comply with a BAT AEL? It could be considered if all the impacts are insignificant, then any cost-benefit analysis should conclude that the benefits of the scheme are also insignificant. Therefore an application for derogation in the case where the environmental impacts of the current non-BAT compliant emissions are insignificant could be deemed to be valid even without detailed cost data and cost-benefit analysis.

**Our response:** If the quantity of a substance released from the installation is insignificant, the IED does not require us to set an emission limit in the permit. (Insignificance refers to the sum of releases of each pollutant from each point source, not just a single point release). In such cases we may not need to consider granting derogation from a BAT AEL for that substance. It is also a requirement of the Directive that pollution is prevented consistent with the application of BAT. So, even if the release was described as insignificant, operating in a manner consistent with BAT would remain a requirement. We will provide more clarity on the relationship between insignificance and derogation requests in a future version of annex K.

Page nine, second paragraph – the word “it” (sixth word in the first sentence) should be removed.

Page nine, last paragraph – what is the relevance of indicating past environmental expenditure in making a case for derogation? How will this information be taken into account in determining whether an application for derogation will be granted? Is this equivalent to paragraph 4.41 of DEFRA’s guidance on Part A installations and IED (referenced on page 10), which states that “the recent history of pollution control investment in the installation in respect of the pollutant(s) for which the derogation is sought” is a relevant technical characteristic? If so, is it necessary to repeat it?

**Our response:** Yes this is equivalent to paragraph 4.41 of DEFRA’s guidance<sup>6</sup>. In considering a case for derogation it would be perverse to reward low levels of past investment. Previous low investment would make it more costly, and therefore easier, to justify not meeting the BAT AEL in the future. We will consider whether it is necessary to repeat it.

Page 10, first paragraph – the word “technical” is misspelled.

Page 10, first paragraph – the guidance referenced is a draft version and the link should be replaced with one to the final version of the guidance -

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/221044/pb13898-epr-guidance-part-a-130222.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221044/pb13898-epr-guidance-part-a-130222.pdf)

**Our response:** Agreed we will update the link.

Page 10, second paragraph – the reference to “an environmental damage costs approach as set out in the supplementary guide to the Green Book” signposts air quality damage costs from the IGCB on the DEFRA web site. These are not the only set of damage costs available and it may be misleading to direct the user to that

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<sup>6</sup> Industrial emissions Directive EPR Guidance on Part A installations. February 2013

particular set of damage costs if they are not those that will be used by the Environment Agency in determining the validity of an application for derogation.

**Our response:** The rewritten annex K will use a basket of measures and damage costs-generated by reference to the IGCB-will be one of those measures. When compiling their case we would expect operators to carry out a sensitivity analysis that highlights those inputs which influence the outcome most significantly.

Page 10, second paragraph – damage costs are not generally available for water pollution, and nor does the COMEAP approach apply to water quality. The Cross-Media BREF also focuses on the assessment of air pollution, rather than water pollution – the only relevant methodology in the BREF (page 1eight) can be used to compare one option with another, but not to undertake an absolute cost-benefit analysis. Some guidance is needed to guide applicants in assessing the cost-benefit analysis for discharges to water.

**Our response:** We aim to improve guidance on dealing with discharges to water within future releases of annex K.

5.7 The UK refineries trade association highlighted the publishing date for the Refinery BREF as mid-2014. They added that the refining sector may face a significant challenge to achieve compliance with lower emission limits within the four-year period if these were subject to significant revision on permit review. They added that refineries operate continuously for long periods and undergo periodic shutdowns (or turnarounds) only for inspection or maintenance purposes, often to meet requirements under the major hazards regulatory regime (COMAH). Most operators operate a five -10 year planning cycle for these turnarounds which, for larger, more complex refineries, involve only partial shutdown of the refinery to ensure continuity of supply. Costs of these turnarounds were expressed in excess of \$100m. They then went on to say that the four-year timescale may be unmanageable where investment in new abatement technology is required to meet revised emission limits for several reasons:

- Major projects typically take three to four years from design to commissioning. If permit revision for UK refineries was to take place in 2015 this would not provide sufficient time to design and build major environmental projects which are currently unbudgeted.
- Turnaround planning within the 2014-201eight timeframe has already been initiated and any additional requirements arising from revision of permit conditions may be difficult to accommodate, especially if the units concerned are not due for turnaround during this period.
- With all 92 operating European refineries facing similar requirements, there is likely to be insufficient capacity in the engineering and construction contracting industries in the short timeframe.
- Even if there were sufficient design contractors available, there are not enough skilled refinery personnel to develop and manage multiple major projects in such a short time. The refineries must also continue to develop safety projects arising from regulatory activities carried out by the joint COMAH competent authority. At the same time projects may be required to meet new product quality requirements (lower sulphur or benzene content) and to ensure they remain competitive through investment in improvement projects.

With these issues in mind the refineries trade association proposed a series of revisions to annex K:

- Recognition of the possibility for derogation to align investment in additional emissions abatement with turnaround planning cycles to avoid compromising supply and supply resilience.

**Our response:** Operators within the refinery sector have four years to comply with the emission limits associated with the BAT AELs. These are contained within the BAT Conclusions published by the European Commission. If refinery operators need more time they have the option of making a case for a time-limited derogation as laid down in the IED. They should demonstrate that compliance within four years would result in disproportionately high costs compared to the benefits whereas compliance at a later date would not.

- The inclusion of downtime costs in calculation of the total cost of complying with the BAT AEL or EQS.

**Our response:** Yes, we think it is reasonable for downtime costs to be included within the costs associated with complying with the BAT AEL.

- Acknowledgement of the constraints in achieving compliance with revised BAT-conclusions due to the limited capacity in the engineering and construction contracting industries and limited operator project management resources.

**Our response:** See response to question immediately above this one.

- Require use of damage costs identified in the HM Treasury Supplementary Green Book Guidance<sup>7</sup>, which is not explicit in the current text in the section “Comparing costs and benefits”.

**Our response:** Annex K has been rewritten and now includes reference to damage costs.

5.8 A trade association expressed the view that the assessment for cost benefit analysis was incomplete because it does not consider the environmental impact element described within Article 14.4 of the Directive. They added “We suggest you include BPEO from IPC as an example”.

**Our response:** Article 14(4) refers to the setting of permit conditions that are stricter than BAT. It refers to the Member State establishing rules under which those conditions may be applied by the regulator. DEFRA has published its own guidance in which reference is made specifically to Article 18 and the setting of ELVs where that applies<sup>8</sup>. Reference to this DEFRA publication is now included within annex D.

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<sup>7</sup> *Valuing impacts on air quality: Supplementary Green Book guidance*, HM Treasury, 2013, available at: <https://www.gov.uk/government/publications/green-book-supplementary-guidance-air-quality> .

<sup>8</sup> Industrial Emissions Directive EPR Guidance on Part A installations. February 2013 DEFRA, available via [www.DEFRA.gov.uk](http://www.DEFRA.gov.uk)

5.9 Another trade association thought the revised annex K focused on derogations and in effect assumed all BAT assessments were identical. Since the number of BAT assessments would be greater than the number of derogation assessments the emphasis of the document should change to reflect this. The title of the document should refer to both.

**Our response:** Annex K has been rewritten to include BAT assessments together with making a case for derogation from the BAT AELs and the title has changed to reflect this.

5.10 Going further, the trade association suggested that operators could not know what they were derogating from if they had not carried out a BAT assessment. They suggested that the revised annex K needs to be expanded to include all BAT assessments if it was to replace the existing version.

**Our response:** Agreed. Annex K now includes BAT assessments together with guidance on making a case for derogation from the BAT AELs.

5.11 It was observed by a trade association that annex K does not define what constitutes compliance with IED. They asked is it sufficient to propose an emission limit value (ELV) within the range of BREF AELs to avoid the need for derogation?

**Our response:** Where a range of BAT AELs is proposed then it would be acceptable for an operator to propose operating an emission limit value (ELV) within the published range.

5.12 Considering the range of BAT AELs available with given techniques within the Iron and Steel BREF, a trade association asked is there a distinction between compliance with the top of a BREF AEL range and compliance with the bottom of the BREF range?

**Our response:** See previous response.

5.13 Looking at the range of techniques and BAT AELs in the BREF, a trade association asked is it necessary to fit all the techniques listed in the BAT Conclusions or is compliance with the ELV sufficient?

**Our response:** The BAT Conclusions are not prescriptive and an operator may choose to adopt an alternative technique, or combination of techniques, providing the same level of environmental protection is delivered as specified in the BAT Conclusions.

5.14 Noting the draft Large Combustion Plant BREF defines BAT AELs for base load plant and not for lower load plant, a trade association asked should 'lower load' plant apply for derogation from BREF AELs. Such plants are expected to adopt the requirements of the Transitional National Plan, Limited Life Derogation or the Limited Running Derogation and comply with less stringent emission limits.

**Our response:** The European Commission has declared that for combustion plants benefitting from the time-limited and specific derogation provisions of Articles 32 to 35, Article 15(3) do not apply for certain air pollutants. And these plants are not required, for those air pollutants, to comply in addition with the conditions for the derogation set out in Article 15(4). Combustion plants which do not benefit from specific and time limited derogations pursuant to the Articles 32 to 35 are obliged to meet the requirements as set out in Article 15(3). However the national authorities may in certain cases, and if all conditions set out there are met, grant derogation according to Article 15(4). We note that Article 18 is applicable under all derogation regimes.

5.15 It was observed by a trade association that annex K implies the procedure for a BAT assessment is the same as a derogation assessment and there is no highlighting of any differences. They asked if the following apply to BAT assessments:

- In a BAT assessment all options will comply with BAT AELs contrary to the information list on page four.

**Our response:** Agreed.

- Is it necessary to provide cost data if the proposed option is the best option in terms of environmental impact?

**Our response:** No.

- Is it necessary to provide data on costs incurred over the last five years in improving the operational performance and environmental impact of the activity?

**Our response:** Not if the operator proposes to comply with BAT and the associated emission limit(s).

5.16 A trade association suggested that annex K implies there is a single BAT AEL option. However, the BREF lists a number of BAT techniques that can be used in combination and specifies AEL ranges rather than single values. Hence different combinations may achieve different AELs, all within the acceptable range. In a BAT appraisal there will be no non-BAT AEL option, hence the appraisal will be between options which all comply with BAT AELs. As a result there may be multiple options each with their own emission level within the BREF range.

**Our response:** This is acknowledged. The operator should justify their chosen options.

5.17 It was noticed by a trade association that version 2.0 of annex K considered a wider range of environmental impacts (summarised within the now deleted Table 2.1) than the lists now presented on page four and five of version 2.1. Although the following impacts are mentioned:

- Environmental concentrations (assumed to be air and water)
- Long term and short term releases
- Comparison with MACs and Environmental Assessment Levels (EALs)
- Annual mass release

Deposition, noise, accidents, visual, odour, Global Warming Potential and waste are missing. Version 2.0 advocated the use of PC/EAL for assessing impacts although this is barely mentioned in the new draft. The software tool lists these impacts, raising an issue of consistency between the tool and the guidance. So, should impacts be based on the new draft or the version 2.0 of annex K?

**Our response:** Annex K has been rewritten to capture the requirements for constructing a BAT assessment and a case for derogation. There will be non-monetised benefits that we will consider in coming to a decision on a case made in support of derogation. However, the cost benefit analysis will be of primary importance.

5.18 A trade association noted on page five of the new annex K the need to take account of changes in production capacity when deriving the cost of an option. They added the document fails to note the importance of defining the basis on which options

are compared. They cited bases where all options have the same fuel consumption or the same production rate. However, the BREF defines BAT in terms of abatement techniques, AELs (mg/m<sup>3</sup>) and energy efficiency. They noted that these are defined for capacity ranges which led them to conclude that emission reductions arising only from reduced production should not be considered in the BAT appraisal.

**Our response:** Following clarification with representatives of the Joint Environmental Programme, it has been explained the combustion of biomass on power stations that historically have burned coal was the subject matter behind this query. At the Environment Agency we understand that discussions are ongoing with the European Commission regarding the inclusion of BAT AELs for releases to air of pollutants resulting from the combustion of biomass on converted coal fired power stations. Once the BAT Conclusions for large combustion plant are published, we will initiate a permit review and seek a response from operators to ask if they can comply with the BAT AELs within the BAT Conclusions document. Where operators decide they cannot comply then a case for derogation would be required and we would consider that request in the normal way.

5.19 References to external data sources for the future cost of electricity generation prompted a trade association to conclude that this section of the new annex K appears to focus on the variable cost arising from electricity consumed by operators. They noted the references quote levelised £/kWh for specific new build technologies and so would have little relevance to consumption from the public supply. They suggested the data required for a BAT assessment would be:

- Price of electricity consumed from the public distribution system, i.e. what an operator pays.
- Price of electricity consumed from own generation and this could be:
- The sale price of electricity sales if the plant sells electricity, or
- The cost of generation if it does not.

Therefore the data would probably be the marginal cost of electricity, i.e. the cost of an increase in consumption rather than the cost of building a new power station.

**Our response:** We agree.

5.20 It was noted by a trade association on page six that the list of Indirect or 'fixed' annual costs includes categories such as overheads, administrative charges, insurance and business rates. They suggested that options appraised may be limited to specific parts of the installation (abatement systems) and as such some of these fixed costs would not then apply.

**Our response:** We agree, unless the installation of the new abatement system has an impact on the fixed annual cost.

5.21 Highlighting the underlined text at the top of page seven of the consultation annex K, a trade association suggested operators will have an understanding of the costs of their own plant and reasons for any high or low costs. However, they suggested that cost data published in consultant's reports or in the BREF are not usually of sufficient transparency to enable any disparity with their own site to be explained. They concluded an operator should be left to justify their own costs rather than explain the BREF costs.

**Our response:** In annex K page seven we say “you need to state clearly why these costs are higher than would be borne by typical industries making reference to any cost data in the BREF.” This may vary from one sector to another.

5.22 Calculation of annualised costs in Table three of the consultation annex K prompted a trade association to highlight the inconsistencies with the text on page five, which refers to costs as they are expected to occur for each year of the project’s life. Hence the approach in Table three and in the software tool may not apply. However, they were content that calculations for time varying costs could be performed using spreadsheets with built-in net present value (NPV) functions.

**Our response:** In its current form the software tool determines annualised costs across the life of the investment. In our consultation we said that the net present value should be determined in expressing the costing data associated with the case for derogation. Hence the software tool will have to change.

5.23 Considering the cost of capital and discount rates, a trade association observed the reference within annex K to the approach set out in the Treasury’s Green Book. They noted this recommends use of the Social Time Preference Rate (STPR), which they thought bore little relation to the cost of capital. They suggested the STPR appears to be related to gross domestic product (GDP) plus a contribution of various risk factors.

**Our response:** We will use HM Treasury’s Green Book discount rate as the basis for discounting the benefits and costs associated with requests for derogation from the BAT AELs. If the operator’s weighted average cost of capital is higher than HMTGB discount rate, their cost of accessing finance should be added as annual payments. These should then be discounted using HMT’s GB discount rate.

5.24 Reflecting on the need for operators to report annual emissions in comparison with Pollution Inventory reporting thresholds, a trade association asked was this for informational purposes or would conclusions be drawn from this? And they added are emissions below reporting thresholds deemed negligible or insignificant?

**Our response:** We have not defined our position on mass releases and insignificance. For now we will limit our definition of insignificance to that described within annex F (air emissions) and annex D1 (surface water discharges).

5.25 Monetisation of benefits of environmental improvements using an environmental damage costs approach prompted operators of fossil-fuelled power stations to claim that the monetary valuation of the damage costs of sulphur dioxide and nitrogen oxides is extremely uncertain and, as a result, the range of plausible values is wide. Citing the formation of secondary particles and what they described as ‘a minimal ability to cause oxidative stress and inflammation’, they claimed the damage cost range for these emissions would be lower than the current range of published data. Hence, given the current state of knowledge, it was not appropriate to directly apply damage cost estimates for sulphur dioxide and nitrogen oxides in the economic assessment of plant abatement modifications.

**Our response:** The central estimate of the air quality damage costs<sup>9</sup> is the value which is central in our assessments of impacts on air quality. The central estimate has been derived from the central range, which is not a wide range, unlike the sensitivities range.

HMT's GB damage cost value for the PMs have been derived specifically for each of the main sectors known to contribute to PMs in the environment. The PM damage cost value for power station emissions is the lowest across all the sectors. Damage cost estimates are one in a basket of measures we will use in coming to a decision on a case for derogation. If operators can justify the use of alternate damage costs then we will consider them.

5.26 Commenting on the monetary valuation option in the last paragraph of the section on "Comparing costs and benefits" on page ten, a trade association suggested the methodology was immature and subject to a high degree of uncertainty due to the wide range of estimates of damage costs, and this should be recognised.

**Our response:** Please see our response to query 5.25.

5.27 Reflecting on the need for operators to supply quotations from equipment suppliers in support of costs associated with a case for derogation, a trade association suggested this would be difficult for two reasons:

- Cost estimates used in the application may be an average or range based on more than one quotation; and
- Quotations are often provided on a commercially-in-confidence basis by the contractor (i.e. they do not want other contractors to know their prices).

**Our response:** The onus is on the operators to provide cost data in support of their request for derogation, without it the regulator would have difficulty supporting the request.

5.28 It was suggested by a trade association that costs can be normalised by expressing them as a cost per unit of output or per unit of pollutant abated. Highlighting the fact that reference to cost ratios, such as £/tonne or £/unit EQ (environmental quotient) were previously in version 2.0 of annex K and now are removed, they commented such ratios are useful for comparing the cost effectiveness of options and should be retained.

**Our response:** Rather than continue to use the 'environmental quotient' we now see the Cross Media BREF<sup>10</sup> as the way forward when expressing such effects. This document identifies seven environmental themes that may be used to consider the impact of a proposal on the environment taken as a whole. Although such ratios are useful for evaluating the cost effectiveness of single pollutant abatement options, the IED frames the test in terms of cost and benefit.

5.29 A trade association noticed the discussion of possible reasons for the preliminary screening of technical options on the basis of applicability or availability had been omitted from annex K. Without reference to the BREF or EPR 1.1 and no discussion of

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<sup>9</sup> HM Treasury's Green Book supplementary guidance on air quality

<sup>10</sup> Economics & Cross Media Effects European Commission July 2006



possible reasons for the preliminary screening out of technical options they thought this supported the view that only two options should be considered.

**Our response:** Agreed, we need to provide greater clarity on possible reasons for the preliminary screening of technical options.

5.30 It was argued by a trade association that installation-specific technical characteristics can include the remaining operating lifetime of the plant and the average level of operation. They suggested that such detail can provide guidance on wider factors, such as the market conditions in which the installation operates, and that these factors should be taken into account in determining the availability of a technique.

**Our response:** DEFRA guidance on setting ELVs where Article 15(3) applies makes clear that the requirements of Article 15(3) apply only where BAT Conclusions have:

- been adopted and published by the European Commission under Articles 15(3) and (6), and
- those Conclusions contain BAT – associated emission levels (AELs).

In relation to Article 15(4), paragraph 4.41 of the DEFRA guidance<sup>11</sup> includes technical characteristics that may be relevant. They include:

- the recent history of pollution control investment in the installation in respect of the pollutant(s) for which the derogation is sought,
- the general investment cycle for a particular type of installation,
- the configuration of the plant on a given site, making it more technically difficult and costly to comply,
- the practicability (particularly bearing in mind Health & Safety and other relevant legal obligations) of interrupting the activity so as to install improved emission control upon the pollutant(s),
- the effect of reducing the excess emission(s) upon other pollutant emissions, energy efficiency, water use or waste arising from the installation as a whole; and
- the intended remaining operational lifetime of the installation as a whole or of the part of it giving rise to the emission of the pollutant(s), where the operator is prepared to commit to a timescale for closure.

So in conclusion, yes there are wider aspects that should be considered.

5.31 It was noted by a trade association that version 2.0 of annex K considered the case of the Best Environmental Option (BEO), and when proposed it removed the need for costs to be considered. However, in the new annex K BEO is absent which implies that cost assessments are required in all cases.

**Our response:** Annex K has been rewritten. Costs should be included when the operator is:

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<sup>11</sup> Industrial emissions Directive EPR Guidance on Part A installations. February 2013

- identifying BAT from a series of options, and
- making the case for derogation from the BAT AEL.

5.32 A trade association noticed the guidance on resolving cross media conflicts had been omitted from version 2.1 of annex K. They added that the new version avoids calculation of the PC for TraC waters, so there is no means to assess PC/EQS for aqueous discharges in the tool. Should the relative impacts of air and water continue to be assessed in this way?

**Our response:** Please see our response to 5.28.

5.33 Commenting on the content of Appendix one, Table one in the consultation annex K, a trade association thought the detailed breakdown of costs far exceeded anything that would be available in the preliminary design stage of a plant modification, when a BAT application would be made. From experience they suggested the most likely costs available would be capital costs of major plant items, additional energy costs, additional maintenance and raw material consumption costs.

**Our response:** We will take account of this comment when redrafting annex K and our cost and benefits analysis tool.

5.34 Omission of Life Cycle Analysis from the new version of annex K prompted a trade association to suggest this was a 'significant deletion'.

**Our response:** We are limiting our considerations to activities within the installation boundary and so Life Cycle Analysis will not be reintroduced into the rewritten annex K.

5.35 It was contested by a trade body that where comparisons are made between a range of BAT options, use of annex K to justify a final choice would be onerous & excessive, indeed unnecessary in most cases. Much simpler justification could be made reducing the costs in time & effort.

**Our response:** Version 2.0 of annex K provided a simple means of enabling the operator to justify BAT from a series of options. The operator may choose an alternative technique which is consistent with BAT and the submission will be judged on its merits.

**Question 5b:** Do you support the view that the life span of some major plant items may be greater than those in Table 5? If so, please provide any evidence of plant operating for longer periods than given in this table?

### **Summary**

Evidence suggests the timescales in annex K should be extended.

5.36 Details provided by members of the United Kingdom Petroleum Industries Association indicated the following:

Buildings: 30 years

Major components (reactors, furnaces, boilers, turbines, ETP's): up to 40 years

Intermediate components (heat exchangers, filters, handling equipment) can be over 20 years

Minor components (motors, drives, burners) can be 10 years or more.

**Our response:** These examples extend the current timeframes in annex K.

5.37 A trade association suggested the lifetime of new build combustion plant may be 30 years or more so 15 years looks low. But plant may be life limited by legislation, for example the Transitional National Plan or Limited Life Derogation in the IED.

**Our response:** Further evidence in support of extending plant life timescales.

5.38 A trade body suggested that paper mills with effluent treatment plants operate well in excess of 20 years.

**Our response:** These specific paper sector lifetimes are noted.

## 2.6 Changes to the H1 Software Tool

**Question 6a:** Do you support these changes? Are there other areas where you think improvements should be made?

### Summary

Responses focused on the operation of the modified software tool and in some cases highlighted areas for improvement in its functionality.

6.1 One respondent requested a worked example of an H1 assessment with the proposed changes in place.

**Our response:** It is our intention to make available a new cost and benefits analysis tool which will be accompanied by a new user guide. This takes the form of a spreadsheet. It should enable users to use the CBA tool to support their assessment of the costs and benefits associated with their claim for derogation from the BAT AELs.

6.2 A water company user thought it was not clear what data should be entered on the Water Emissions Inventory page. They were not sure if the concentration data were those of the substance in the effluent and there is no steer from the table headers.

**Our response:** On the Water Emissions Inventory page we have titled the page "Release concentrations of substances present in discharges to water". This confirms we are looking for details of the substances within the effluent stream.

6.3 A request from a water company user for us to be clear just what the tool will calculate automatically and where data should be entered into the tool.

**Our response:** Generally speaking data should be entered into the blue cells, but we will take account of any discrepancies in our revision of the User Guide.

6.4 A water company user spotted a reference to annex D Appendix B when there are no 'A's and 'B's in annex D only 1's, 2's and 3's.

**Our response:** We will modify cross references where necessary.

6.5 Printing problems were highlighted by a consultant. They found when printing the initial 'Welcome' page that six pages were printed when only one is needed. And when the H1 assessment is produced as a PDF document it requires an additional amount of formatting to remove these unnecessary pages.

**Our response:** We introduced a new printing element to the functionality of version 2.72 of the software tool. In the 'Summary Tables' page before the graphs in Step three we have added the option 'Export to Excel'. This enables the user to export all input and tool output data to a spreadsheet which can then be saved and/or printed off as necessary.

6.6 When using the tool in Microsoft Access 2003 an industrial user found errors in the EQS values for TraC water assessments. Specifically, if the water discharge location is selected as a discharge to coastal waters the tool assesses Step one against the Inland waters EQS rather than the salt water EQS. Although the salt water EQS is used in TraC water EQF Test five.

**Our response:** This observation is correct we intend to correct these errors.

6.7 Going further the industrialist found that if a discharge to water has been assessed and subsequently the effluent flow rate in the page headed 'Water Release Point' is changed, this change is not reflected in the calculation of significant loads of PHSs in the sheet headed 'Water Impacts Test one - TraC'.

**Our response:** Again this observation is correct and is something we will need to review.

6.8 One water company advised us that because of the Software Tool delays between the launch of the Hazardous Pollutants OI and the new tool they had developed their own spreadsheet and intended to use that.

**Our response:** We will check the assessment once received in support of a permit application.

6.9 An industrial trade association advised us that we may need to change the Excel Object Library 12 to 11 under the reference section to enable the tool to work with Microsoft Access 2003.

**Our response:** This advice is appreciated and we have provided means of undertaking this modification when operators have requested it.

6.10 The industrialist added that the Software tool generated the wrong EQS for TraC for As, for Cr VI, for Cd<40 and for Cu 0-50.

**Our response:** We agree with this observation and will review before releasing the tool.

6.11 A trade body asked how H1 should be used with sectors where the impact is based less on hazardous pollutants and more on BOD/COD, suspended solids, where there are no comparators.

**Our response:** H1 does not provide a screening mechanism for 'sanitary pollutants' such as listed here. Such discharges should be assessed using modelling to determine their impact on the receiving water. Guidance is provided in annex D2.

**Question 6b:** Looking at the H1 software tool 'Page help' and 'Box help' are there any areas where you think the support and guidance could be improved?

### Summary

There were two comments received to this particular question and each focuses on specific areas of support.

6.12 A water company suggested the help box is very brief and provides no help other than refer the user to guidance documents. Additional comments should be added to this.

**Our response:** This comment is noted.

6.13 A consultant made the assumption that the hyperlink to the 'Horizontal guidance' webpage on the Environment Agency website provided in the Help tool will continue to work after the transfer to the Gov.UK website in 2014 and will continue to provide the same level of information.

**Our response:** Unfortunately, Gov.UK will not support the H1 Software Tool and we plan to make the modified version of the tool available via our National Customer Contact Centre. At this juncture it is not clear what form the H1 system will take on Gov.UK, although the documents that were published in 2011 have, temporarily, been transferred across in their original form. We are working to try and deliver amended annexes to the Gov.UK H1 webpage before the end of this financial year.

## 2.7 The scope of the Environmental Permitting Regulations (EPR) in relation to the making of bespoke permit applications to the Environment Agency

**Question 7:** In addition to these changes are there any other areas of EPR where you feel H1 should be modified to either simplify the making of bespoke applications or reduce the burden on applicants when compiling their bespoke application?

### Summary

Some responses reflected on the transitional nature of the H1 guidance and the need for us to provide support in its use. Natural Resources Wales and Natural England both provided a series of responses of general comments on the content and use of annex F.

7.1 A Water company requested a proportionate increase in the free advice time offered by the Environment Agency to applicants where changes to H1 have added to the complexity of applications made under the IED and WFD.

**Our response:** We do not consider that either IED or WFD has significantly increased the complexity of applications. For example, the IED requirements for baseline reports and monitoring conditions were required under previous legislation. Similarly the guidance for compliance with the Dangerous Substances Directive required an assessment of impact from discharges of substances and a permit application where this met tests of significance. We have also provided training to water company staff on using the Hazardous Pollutants guidance. We do not intend to increase the free advice time for pre-application discussions.

7.2 Interest in stakeholder workshops to disseminate information on the implications of IED and WFD for the EPR was shown by a Water company.

**Our response:** We developed the Hazardous Pollutants Guidance with water company input and we have provided training for water company staff on its use. For IED we are engaging with stakeholders through our industry sector groups. We do not see the need for and are not planning further stakeholder workshops.

7.3 Following on from the previous query, the consultant asked if data is missing, or there is insufficient number of results but there is a short term H1 assessment submission deadline, should the data available be used or would there be an extension of the submission date to allow for sampling and analysis.

**Our response:** No permit application should be made until all the required data are available.

7.4 A consultant asked when the updated H1 guidance will be introduced.

**Our response:** We are aiming to place all amended annexes onto Gov.UK by the end of this financial year.

7.5 A consultant asked will previous H1 assessments be expected to be updated ever or within a certain timeframe, or will they still be accepted until a permit is varied?

**Our response:** It is likely that H1 assessments will need to be revisited when the operator makes an application for a variation to an existing permit, or when prompted by a requirement within a permit review?

7.6 A consultant asked if they would be given access to the Environment Agency's Easimap.

**Our response:** Easimap is currently only available to our employees. If a consultant did need to access the maps they could request the information in the normal way via our National Customer Contact Centre on 0370 850 6506.

7.7 Concerned about the provision of support, a consultant asked will there be an Environment Agency team to answer H1 questions, or alternatively, designated staff in each Environment Agency group and/or area with detailed knowledge and experience?

**Our response:** Our expertise in H1 is being grown with the development of a Super Users group who will act as the first port of call for any local queries. Failing that, queries will come in to N Heptinstall.

7.8 The consultant went further and asked what additional impacts should be considered when a SRP fails due to one criterion?

**Our response:** We publish the risk assessment associated with each Standard Rules permit. Where one criterion within the standard rule is not satisfied in the application the operator should carry out their own risk assessment on that aspect of their activity. Such a situation requires an application to be made for a bespoke permit. Guidance on undertaking risk assessments for bespoke permits is available through the H1 series of documents.

7.9 Another consultant asked how will the Environment Agency links to external guidance work in Gov.UK?

**Our response:** An H1 horizontal guidance webpage is included on GOV. UK, the link is: <https://www.gov.uk/government/consultations/environmental-permitting-changes-to-h1-environmental-risk-assessment>

7.10 The refinery trade association stressed that H1 needs to clarify conflicts between IED, Refinery BREF and WFD EQS, particularly the EQS requirements for priority hazardous substances, priority substances and other pollutants.

**Our response:** We have to have regard to the Environmental Quality Standard Directive<sup>12</sup> (EQSD) in determining what should be BAT for the installation. Having seen that a local receiving water body is of poor status and in danger of/actually breaching EQSD standards, we would require a higher standard of BAT for the emitting installation. That would translate itself into a stricter ELV, possibly stricter than the BAT-AEL.

7.11 "If a 'full-suite' of analysis has not been carried out on a set of samples, should the H1 assessment simply be carried out on the substances for which data is available? Or should additional analysis be carried out prior to the assessment?"

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<sup>12</sup> 2008/105/EC



**Our response:** We need data for all substances which are likely to be in the discharge and all the data should be obtained before the assessment is carried out.

7.12 “If data are missing, or there are insufficient number of results but there is a short term H1 assessment submission deadline – should the data available be used or would there be an extension of the submission date to allow for sampling and analysis?”

**Our response:** No permit application should be made until all the required data are available. Any uncertainties in data required to support an application should be resolved in pre-application discussions with us prior to making an application.

7.13 “Discharges to TraC – will it only be EA employees who have access to EASIMAP and/or the maps available at the EA National Permitting Centres? Or will there be access for consultants such as ourselves?”

**Our response:** Easimap is only available to our employees. If a consultant did need to access our information they could request the information in the normal way via our National Customer Contact Centre on 0370 850 6506.

7.14 Public Health officials sought confirmation of what amendments had been made to the postscript on lead standards in Table B1.

**Our response:** The previous postscript reference ‘e’ has been removed. This referred to spatial limitations where the standard did not apply because of historic contamination in the vicinity of some old industrial sites.

7.15 The removal of carbon monoxide from Table B5 prompted Public Health officials to ask if this was because it is included in Table B1.

**Our response:** Yes, that is correct.

7.16 Looking at page 38 in annex F, a consultant pointed to reference to an improved, more up-to-date approach for the derivation of new EALs. But it noted the EALs in Table B5 were those from the old H1 that had been derived using the earlier method.

**Our response:** In 2012 we did consult the public on proposals for a revised hierarchy for the derivation of new environmental assessment levels. However the consultation response document has not been published and so the original hierarchy remains in place. Consequently the old H1 EALs contained within annex F version 2.2 remain unchanged.

7.17 The content of annex F confused one trade association. They cited the example of Appendix B and suggested that EALs for human health appears to be a mixture of old and new with neither relating to the other. As a result, it is no longer clear how these values have been derived.

**Our response:** Please see our response to query 7.16 above.

7.18 Referring to the EAL consultation of 2012, a trade association sought clarification on how the Environment Agency intends to change over to the new system of EALs. Specifically they sought information on the process, the timing whether industry will be consulted on both the values and methodologies used prior to their implementation.

**Our response:** Please see our response above this query.

7.19 A series of queries and proposed changes to the text in annex F were suggested by Natural Resources Wales, they are:

In the section “Screen out insignificant process contributions’ after the first ‘long term’ insert ‘i.e. annual mean;

**Our response:** If published in its current form we will modify annex F to include this proposed change.

In the section “Screen out insignificant process contributions’ after the first ‘short term’ insert ‘i.e. hourly mean;

**Our response:** If published in its current form we will modify annex F to include this proposed change.

The title ‘Detailed modelling of long term emissions’ to change to ‘Detailed modelling for long term benchmarks’.

**Our response:** If published in its current form we will modify annex F to include this proposed change.

Page 13 the sentence ‘As a guide, replace ‘of long term emissions’ with ‘for relevant long term standards’.

**Our response:** If published in its current form we will modify annex F to include this proposed change.

Page 13 section ‘Detailed modelling of long term emissions’ last bullet ‘±50per cent’ thought high.

**Our response:** This is taken from annex 1 of the EU Ambient Air Quality Directive.

Bottom of page 13, last sentence is not clear.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 14 First paragraph – ‘same statistical basis’ you cannot add 98 percentiles to 98 percentiles.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 14 – heading ‘Detailed modelling ‘of short term emissions’ should read Detailed modelling ‘for short term benchmarks’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 14 – heading ‘Detailed modelling ‘of short term emissions’ first line ‘..detailed modelling of short term emissions’ should read ‘..detailed modelling for short term benchmarks’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 14 – heading ‘Detailed modelling of short term emissions’ first bullet ‘short term emissions’ should read ‘short term exposures’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 15 – section ‘Estimating total impact of emissions’-it seems this section is not needed?

**Our response:** We have said that whilst the environmental quotient enables the comparison of options the Cross Media BREF delivers a more holistic assessment. Hence we will remove this small section from annex F.

Page 21 Table 3.2 - insert ‘hourly average’ after ‘log term 98 percentile’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 21 Table 3.2 - insert ‘100 percentile hourly average’ after ‘Maximum short term’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 22 line four - insert ‘it is likely to’ after ‘and so’.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

Page 34 where are Tables B2, B3,B6,B7?

**Our response:** B2, B3 were not included in 2010 and B6, B7 were removed in our proposed change to the derivation of EALs.

Page 14 last 2 paragraphs – smaller combustions units (<20MWth) are not regulated by the Environment Agency, yet they will still need to comply with the same conservation requirements as larger combustion plant. If the PC exceeds the relevant environmental standard (e.g. critical levels, nutrient nitrogen critical loads, acid critical loads) outlined in annex F then further investigation is warranted.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

DEFRA has produced guidance for Part A2 and Part B processes which should be brought to the attention of the operator during pre-application discussions.

**Our response:** If published in its current form we will modify annex F to improve the clarity.

7.20 A series of queries and proposed changes were suggested by Natural England, they are:

Page seven final paragraph – is the 24hr critical level for NO<sub>x</sub> a statutory EQS? If not, the penultimate sentence here needs to refer to more than just statutory EQS.

**Our response:** The 24hr mean value for nitrogen oxides (as NO<sub>x</sub>) appears through implementation of the Ambient Air Quality Directive 2008. It is used in terms of ecological assessment as an indicator of harm at all UK locations.

Page eight receptors – different distance criteria are used for intensive livestock units (annex B) and reference should be made here. The final paragraph refers to the assessment of deposition and it may be clearer if the section starts with a sentence covering ground level concentrations (and critical levels).

**Our response:** The point about screening distances for ammonia resulting from Intensive Agriculture is well made. We will add a sentence to this section referring to Intensive Agriculture and annex B.

Page 10, photochemical ozone – is the inclusion of the word ‘no’ in the first sentence a typo?

**Our response:** If published in its current form we will replace ‘no’ with ‘any’.

Page 11, Screen out insignificant process contributions – first bullet under 10 per cent process contribution benchmark – we do not believe this explains why a higher benchmark is justified.

**Our response:** Generally, modelling prediction of short term average has a larger model uncertainty than a long term average.

Page 11, Estimating the PEC – It wasn’t clear from reading this paragraph why a “qualitative” response should be provided.

**Our response:** If published in its current form we will replace “qualitative” with “quantitative”.

Page 12, Identifying significant releases – the introductory sentence to this section says that there are three types of air quality standards but then only has two sub-headings? There should also be mention of critical loads and levels for ecosystem protection here too.

**Our response:** Because critical loads are not an air quality standard there are only two types and if published in its current form we will change the text accordingly.

Page 13, detailed modelling – possible error margin of  $\pm 50$  per cent - is there a reference you could include for this?

**Our response:** Details of modelling target uncertainties in compliance with the EU Ambient Air Quality Directive may be found in annex one to that directive.

Page 14, detailed modelling, last paragraph – APIS is also an accepted (and widely used) source of background concentration/deposition data.

**Our response:** Agreed. If published in its current form we will add APIS to the list.

Page 14, detailed modelling of short-term emissions – is this 20 per cent benchmark (and formula) new?

**Our response:** No, it’s been a part of H1 since 2003.

Page 18, calculate process contribution – does this calculation match (is it consistent with) the guidance in AQTAG06? Note – annex B also advises that ammonia needs a variable deposition factor.

**Our response:** The deposition calculation is used to calculate the metals (in the particle phase) deposition. AQTAG06 and annex B do not deal with particle deposition. Hence it is consistent.

Page 19, evaluate the consequences – the deposition of S and N in relation to effects on nature conservation sites can be assessed quantitatively by comparison with the established critical loads.

**Our response:** If published in its current form we will remove the penultimate bullet point. This is because this deposition calculation is mainly for particles. The deposition of S and N is dealt with in AQTAG06 and annex B.

Page 39 – critical levels and loads for assessment... – not convinced “worthy of protection” is quite the right terminology to use here. In the examples of sites, I would include SACs. Not sure what is meant by “In addition, material or industrial/commercial activities may have particular environmental requirements”? In the last paragraph, suggest replacing ‘at risk from’ with ‘sensitive to’ acidification and nutrient enrichment.

**Our response:** We agree that “worthy of protection” is not quite the right terminology to use here. If published in its current form we will amend the text. We will also consider adding Conservation of Habitats and Species Regulations 2010 for SPAs and SACs sites, and Countryside and Rights of Way (CRoW) Act 2000 for SSSI sites.

Page 42, ambient/background levels – data from APIS is also widely used and accepted.

**Our response:** If published in its current form we will add a link to APIS.

Page 43, last sentence – suggest you include reference to deposition as well as concentrations.

**Our response:** Generally, the deposition is derived from the predicted concentration. The current H1 rightly focuses on concentration. For completeness, you may include reference to deposition as well, but a light touch will do.

## 2.8 Please provide any other comments

### Summary

A small number of responses were made under question eight of the consultation document. Most reflected issues in specific annexes across H1 and in those cases the queries are included under the specific sections of this report. Two queries were outside this framework and these are listed below.

8.1 A water company highlighted the omission of a regulatory impact assessment with the consultation. They expressed an expectation that an RIA would be included with our response to the consultation.

**Our response:** We have included at the start of our response to question 3a a section entitled 'Accountability for Regulatory Impact'. Within that section we have set out what we believe are the requirements on us when we proposed to change our screening methodology for hazardous pollutants.

8.2 A water company had a comment regarding annex H and global warming potential. They asked for an explanation how the emission factors in Table B1 and B2 are expected to align with other areas of greenhouse gas reporting.

**Our response:** For the climate change agreement (CCA) scheme the energy emission factors used are those from DEFRA's 2012 greenhouse gas reporting guidance. The text below is taken from the technical annex to the individual climate change agreements that every operator and sector association enters in to.

With the exception of coke and ethane, the figures in table one are taken from Table 1c of annex one of the 2012 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. In the case of coke and ethane, the figures are carried over from fuel conversion factors in CCA10 for the old CCA scheme (2002-2010). The figure for electricity is the five year rolling average for 2010 in table 3c of annex three of the 2012 Guidelines to DEFRA/DECC's GHG Conversion Factors for company reporting. The figure of 0.0546 kg/kWh of electricity is in primary energy terms and 2.6 units of primary energy are assumed to be associated with each unit of consumed electricity. The following link may assist you further.

See <https://www.gov.uk/government/publications/climate-change-agreements-technical-guidance>

The intention is to use these factors for the entire lifetime of the current CCA scheme that runs until 2023.

## References

Countryside and Rights of Way Act 2000

H1 Horizontal Guidance Note. Environment Agency 2011 available via:  
<https://www.gov.uk/government/publications/h1-environmental-risk-assessment-for-permits-overview>

HSE (2011) EH40/2005 Workplace Exposure Limits 2nd edition, available via:  
[www.hsebooks.co.uk](http://www.hsebooks.co.uk)

The Environmental Permitting (England and Wales) Regulations 2010 SI 675 London:  
The Stationery Office

The Environmental Permitting (England and Wales) (Amendment) Regulations (EPR)  
2013 SI 390 London: The Stationary Office

## List of abbreviations

ADMS	Atmospheric Dispersion Modelling System
AQTAG	Air Quality Technical Advisory Group
AW	Ancient woodland
BAT AEL	Best Available Techniques Associated Emission Level
CAPEX	Capital expenditure
CCA	Climate Change Agreement
DOC	Dissolved Organic Carbon
EPR	Environmental Permitting Regulations 2010/2013
EQS	Environmental Quality Standard
ISO	International Standards Organisation
JNCC	Joint Nature Conservation Committee
LNR	Local Nature Reserve
LOD	Limit of Detection
LPG	Liquid petroleum gas
LWS	Local Wildlife Sites
MCERTS	Environment Agency's Monitoring Certification Scheme
NNR	National Nature Reserve
OPEX	Operating expenditure
OSM	Operator self monitoring
PC	Process Contribution
PEC	Predicted Environmental Concentration
PM	Particulate Matter
Q90	90 per cent exceeded or low flow rate
Q95	95 per cent exceeded or low flow rate
Ramsar	1971 Convention on Wetlands
SAC	Special Area of Conservation
SPA	Special Protection Area



SSSI	Site of Special Scientific Interest
STRF	Sewage Treatment Reduction Factor
TraC	Transitional Waters (Estuarine and coastal)
UKAS	United Kingdom Accreditation Service
UWWTD	Urban Waste Water Treatment Directive
Vd	Deposition velocity
WFD	Water Framework Directive

## Appendix

<b>Respondents to the consultation</b>
AWE, Aldermaston
British Poultry Council
Chemical Industries Association
Confederation of Paper Industries
Energy UK
M J Carter Associates Limited (2)
National Farmers Union
Natural England (2)
Natural Resources Wales (2)
Public Health England- Centre for Radiation, Chemical & Environmental Hazards
RPS Group
Severn Trent Water
SLR Consulting Limited
South East Water
Thames Water
UK Petroleum Industries Association
UK Steel - S Baker
Yorkshire Water

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Department  
for Business  
Innovation & Skills

**ACCOUNTABILITY FOR  
REGULATOR IMPACT**

Guidance

JULY 2013

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# 1. Overview

## 1.1. Regulators are asked to:

- review how they engage with regulated businesses<sup>1</sup> and publish their approach online (see section 6);
- consider their wider approach to sharing their evidence base (section 6);
- make a public commitment that they will follow the Accountability for Regulator Impact (ARI) principles when considering introducing change (section 6);
- discuss with representatives of affected businesses what changes in the burden on business they should regard as significant enough to trigger an Assessment (section 4);
- prepare draft Business Engagement Assessments in respect of such changes, which should describe the proposed change and provide a sound and realistic assessment of its expected impact on business (section 5);
- engage business about such Assessments before finalising them (section 6);
- make public the draft and finalised Assessment (sections 6 and 7);
- report very limited information about Assessments to BRE every six months, with exception reporting on very large proposals between those returns (except to October 2014 where a separate return on each draft or final assessment should be submitted) (section 9).

1.2. If the impact cannot be broadly agreed, business representatives can choose to submit their own estimate of costs alongside that of the regulator and ask the independent Regulatory Policy Committee (RPC) to review the issue.

1.3. This guidance reflects engagement with Trade Associations and regulators, including the experience of seven “pioneer” regulators. **Comments continue to be welcome.** They should be sent to [betterregulation@bis.gsi.gov.uk](mailto:betterregulation@bis.gsi.gov.uk). We would also welcome information from regulators or businesses about examples of good practice. BRE is offering training and information-sharing opportunities to regulators to support implementation.

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<sup>1</sup> Throughout this guidance, “business” includes the voluntary sector.

**Good Practice Example:**

The Medicines and Healthcare Products Regulatory Agency (MHRA) regularly co-produce assessments of the impact of their regulatory changes with their Trade Associations. They believe that this encourages greater clarity about the impact of new proposals and increases the likelihood of agreement regarding the costs of the change.

## 2. The goal of this guidance

- 2.1. **Regulators' proposals to change their operational policies, processes or practices can have important impacts on the businesses they regulate, and hence on the prospects for economic growth.** By capturing and quantifying these impacts (both positive and negative) and engaging effectively with business in advance about the proposals, regulators can
- demonstrate that the impact on business of changes in these regulatory activities is proportional to their policy goal;
  - identify alternative ways to achieve their desired regulatory goal whilst minimising costs to the regulated;
  - increase the effectiveness of regulatory activity by getting a better understanding of its likely effect;
  - highlight areas where burdens have been reduced as a result of a change in policy, process or practice; and
  - improve their reputation with business, and therefore improve businesses' willingness to comply.
- 2.2. The Chancellor announced in his 2012 Autumn Statement that Government wants to see all regulators undertaking this sort of good practice. That outcome is the goal of this guidance.
- 2.3. The Chancellor's announcement was part of a wider package of measures which aim to help regulators to enable compliant businesses to grow. The package also included consultation on a statutory duty for regulators to have regard to growth; a revision of the Regulators' Code; a Focus on Enforcement Appeals Review looking at the appeals mechanisms of national and local regulators; and HM Treasury action on fees and charges applied by regulators.
- 2.4. Some regulators are already delivering excellent business engagement and are using innovative approaches to consult effectively and assess their impacts. This project aims to build on this activity and to help share best practice across the spectrum of regulatory bodies and supports the civil service reform objectives of better policy making and being open and accountable.

- 2.5. Quantification will also provide central government and external stakeholders with a useful indication of overall trends in the impact of regulatory activity. But it is not the goal of this project to produce a definitive measure of that impact.

### 3. Scope

- 3.1. **This guidance describes minimum expectations for engagement by national non-economic regulators about the impact on business of changes in regulatory policy and practice.** Other regulators may also want to adopt it. Where regulators' engagement practices already exceed these expectations we would encourage them to continue those practices and to share them with others.
- 3.2. **This guidance applies from July 2013.** Some regulators may choose to apply it to changes already under way at that date, but it should not be applied to any change announced before the 2012 Autumn Statement.
- 3.3. Regulating Departments are responsible for producing Impact Assessments for changes in policy which have the force of law. This guidance applies only to changes for which no Impact Assessment is required.
- 3.4. Whilst the Government wants regulators to reduce their overall burden on business, this guidance does not include an equivalent of the One-In, Two-Out rule for burdens arising from regulators' own decisions.
- 3.5. This guidance applies to national non-economic regulators operating in England. It only applies in Scotland to regulatory functions exercised in reserved matters; and in Northern Ireland to regulatory functions which have not been transferred. It does not apply to regulatory functions which are only exercisable in or as regards Wales.
- 3.6. This guidance does not generally apply to the regulatory activities of local authorities. It does, however, apply to the setting of an enforcement framework for local authorities by a national regulator.

### 4. What proposals should trigger an Assessment?

- 4.1. Any proposed change in policy, process or practice by a regulator which does not require a full Impact Assessment<sup>2</sup>, but which creates a **significant** increase or decrease in the burden of regulator activity on business should trigger an Assessment. This

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<sup>2</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/211165/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211165/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf)



includes enforcement and operational policy changes whether instigated by the regulator or central government. Examples – which are not exhaustive – include

- changes to the content or status of non statutory guidance<sup>3</sup>;
- moves from paper-based to electronic reporting;
- new or amended information obligations;
- changes to or new standards;
- changes to an inspection, enforcement or licensing framework or regime – but not individual enforcement decisions (see paragraph 4.4 – below) or changes to individual licenses;
- Changes in the regulator’s provision of information, advice or training to businesses.

4.2. Assessments are only required for proposed changes with **significant** effects on business, whether positive or negative. What is “significant” in the circumstances of a particular regulatory regime should be determined by the views of the businesses concerned. The interpretation of “significant” should take into account

- the total impact, of the proposal
- relatively large impacts on a particular **sector, size or type** of business
- the likely volume of proposals and the capacity of business representatives to deal with the cumulative impact of numerous proposals.

#### Example approaches to determining which proposals should trigger an Assessment:

1. The Coal Authority has engaged their key Trade Associations to agree their significant changes to which Accountability for Regulator Impact principles could be applied.
2. The Environment Agency has identified its programme of work for all changes being introduced during the year. By bringing this list together, the Environment Agency identified the changes which it believed to be significant, and it will then be able to discuss and agree this list with Business representatives before applying Accountability for Regulator Impact principles to the agreed significant changes.
3. The Food Standards Agency will apply preliminary assessments to all identified changes to identify those which are significant, and then develop these proportionally to the scale of the impact.

<sup>3</sup> As defined in the Better Regulation Manual (see preceding reference).

- 4.3. In areas in which the regulator expects to take repeated or rapid action it may make more sense to assess any changes to the regime which the regulator operates, rather than individual activities within that regime. For example, the Environment Agency has previously applied temporary measures to help fill farm reservoirs to ensure that farmers affected by drought conditions had enough water available to abstract. The application or dis-application of temporary measures of this type (which can occasionally be in response to emergency situations) would not normally be subject to ARI, but a change to the way the overall regime is implemented would be.
- 4.4. Where a significant precedent is set by a decision on a single case, regulators should consider whether it would subsequently be appropriate to prepare an assessment of the changed policy, without prejudice to the decision on the individual case.
- 4.5. Where national regulators operate in partnership with local authorities, the activity in scope is the enforcement framework which the national regulator sets for local authorities. Changes in individual local authorities' policies and practices within this framework are not in scope.
- 4.6. Where a regulator delivers some or all of its functions through another body (including another regulator) it should ensure the principles of ARI are applied appropriately.
- 4.7. Where the regulator is making policy or practice changes in addition to those reflected in a full Impact Assessment, the regulator should prepare a BEA in respect of its additional changes where these are significant. This may draw on the material in the Impact Assessment.

## 5. Content of Assessments

- 5.1. **The key requirement is that an Assessment should be sound and realistic, and make sense to the business representatives who will be discussing it.** The Assessment should use business-friendly language and presentation. Regulators should seek feedback from business representatives about the way in which Assessments are put together, so that future Assessments are increasingly helpful.
- 5.2. Each draft Assessment should set out the options for change (if there is more than one), and describe their impact on business, including both financial and non-financial factors. This description **may** include reference to indirect impacts of the change, and should cover the proposal's full geographical scope (e.g. UK). An Assessment should in addition:

- Include where possible a **quantification of the total expected direct<sup>4</sup> cost or benefit to business** and a transparent explanation of the calculation<sup>5</sup>;
- Consider whether there may be costs and benefits to business which are not readily quantifiable – for example if a change resulted in improved security or happiness for a business’s employees. When this is the case, a qualitative assessment of the impact on business should be provided;
- Estimate the positive and negative impacts on both current and potential future businesses;
- Specifically assess the proposal’s effects on **small and micro businesses** where the owner/manager often takes personal responsibility for regulatory matters;
- Make clear the geographical scope of the change in policy / practice e.g. England and Wales, England only.

### 5.3. When quantifying the impacts on business, regulators should

- Identify which impacts are transitional only (e.g. one off costs) and which are recurring (e.g. changes to annual reporting requirements);
- Analyse costs and benefits over an appropriate time period, discounted using the current year as the price base, and give the annual average figure. Costs and benefits should be analysed over a ten-year period with a discount rate of 3.5%, unless the Assessment makes a case for alternative figures; and
- Apply the principle of proportionality to assess what level of resources to invest in analysis, both for the measure as a whole, the presentation of any alternative options and when allocating resource to individual issues within the BEA.

### 5.4. Where a proposal has a significant impact on the regulator’s total costs, one of the impacts which should be discussed in the Assessment is the effect on any fees or charges which the regulator imposes.

### 5.5. A template for Assessments has been developed <https://www.gov.uk/government/publications/regulator-impact-accountability-guidance>. The majority of the template requires qualitative responses (for example asking regulators to provide the reasoning behind their intended action), with answers likely to be no more than 1 or 2 short paragraphs in most cases. **As long as**

<sup>4</sup> “Direct” costs and benefits are defined in the Better Regulation Manual (see preceding reference).

<sup>5</sup> Regulators may want to refer to the Green Book ([http://www.hm-treasury.gov.uk/data\\_greenbook\\_index.htm](http://www.hm-treasury.gov.uk/data_greenbook_index.htm)), or the Standard Cost Model (<http://www.berr.gov.uk/files/file44503.pdf>)

**the requirements in paragraphs 5.1 to 5.4 above are met, regulators need not conform to this template.**

- 5.6. A spreadsheet to support discounted cost calculations has also been developed.  
<https://www.gov.uk/government/publications/regulator-impact-accountability-guidance>. Alternatively regulators may wish to develop and use their own tools, which should be publicly available.

### Good Practice:

The Environment Agency has developed a simple spreadsheet tool to help teams calculate the costs or savings to businesses of proposed new measures. It offers standard costs and discount rates and allows for high/medium/low estimates where precise data are not available. It provides a clear audit trail to show how figures have been arrived at, which will help identify the source of any differences with industry estimates. Final figures are expressed as the Equivalent Annual Net Cost to Business (EANCB) for each option assessed.

## 6. Engagement with business

- 6.1. Each regulator will need to consider the best way to engage regulated businesses in the light of its own circumstances.** A regulator may want to consider the good practice in the Government's Consultation Principles<sup>6</sup>, but is free to agree alternative arrangements with representatives of relevant businesses.
- 6.2. As noted above, many regulators already have established channels to engage businesses on at least some issues. Regulators are encouraged to build on this existing good practice. When planning how to implement this guidance they may want to discuss the issues through those channels.
- 6.3. Where there are no established channels, or they do not cover the bulk of regulated businesses, for many regulators the best way forward will be to approach relevant Trade Associations. To ensure that participants have the best practical knowledge of the impact of regulatory activity, Trade Associations may want to nominate practitioners from member firms rather than their own staff. Relevant business representatives could also include professional bodies, other groupings or individual businesses where that is appropriate given the composition of the group of businesses affected.
- 6.4. Where Government has prepared an Impact Assessment to support consultation on new legislative changes, the regulator

<sup>6</sup> <http://www.cabinetoffice.gov.uk/resource-library/consultation-principles-guidance>

should discuss with its parent Department how to manage joint engagement with business around the Impact Assessment in a way which will make sense for business. Where a change in policy originates in the regulator's parent Department but does not require an Impact Assessment, the regulator should agree with the Department a co-ordinated approach to engagement.

- 6.5. Regulators should publish online a brief summary of their approach to engaging businesses about their Assessments, including a commitment to following the Accountability for Regulator Impact principles and a reference to this guidance.
- 6.6. Most regulators are unlikely to have the capacity to engage directly with all regulated businesses. However draft Assessments should be posted online so that businesses can comment on them either directly or via representatives.
- 6.7. Regulators should be willing to share with business the evidence underpinning their Assessments except where there are good reasons to the contrary. Regulators may wish to consider their wider approach to sharing their evidence base – for example online – outside the context of individual proposals for change.
- 6.8. Businesses and their representatives who believe that they have not been properly engaged about the impact of a significant change should approach their regulator to discuss and resolve concerns, using the regulator's complaints process if needed. If a regulator does not have a complaints process, businesses may approach the regulator's parent Department, and failing that the Better Regulation Executive. Contact details are available on the gov.uk website. Disagreements about the impact of a significant change should be dealt with under section 8 below.

## 7. Finalising Assessments

- 7.1. One of the objectives of this project is that, having considered business feedback on Assessments, regulators may change some proposals to ensure a more favourable impact on business and/or a more effective regulatory outcome.
- 7.2. In the light of business feedback, once a regulator has finalised its proposed change it should **publish online a finalised Assessment** in respect of the option which is being taken forward. This should be done before the change is implemented.
- 7.3. A regulator should take the (draft or final) assessment into account in its decisions on proposed changes.

## 8. What if impact can't be agreed?

- 8.1. If business representatives consider that a regulator's Assessment prepared under this guidance significantly mis-states the impact of the proposal on business, they should try to resolve the issues with the regulator.
- 8.2. Where both parties have a discussion in good faith based on openly shared evidence, broad agreement should be possible in the great majority of cases. However if following such discussions representatives of a significant group of businesses believe that the financial impact figure in a finalised Assessment is substantially mis-stated they may **ask the Regulatory Policy Committee<sup>7</sup> (RPC) to review the regulator's Assessment.**
- 8.3. To seek such a review they should send to the RPC their own assessment of the proposal's impact, alongside that of the regulator, highlighting where this differs from the regulator's Assessment. They should quantify the differences wherever possible. They should indicate their evidence sources within their assessment.
- 8.4. The RPC will not consider a case unless the business representatives' assessment has been shared in full with the regulator concerned, to allow the opportunity to reach agreement about impact.
- 8.5. The RPC will aim to complete consideration of the cases presented to them within 30 working days. An RPC reference does not require a regulator to delay implementation of its proposals. However it would be good practice to do so unless a change is genuinely urgent or a request for review is clearly vexatious.
- 8.6. The RPC should decide whether to review a case put to them by business representatives taking into account the following criteria:
  - There should be a substantial difference between the assessments made by the regulator and business representatives – typically at least 50% of the impact for smaller proposals and, in any event, usually reflecting a difference in opinion over the basic assumptions or analysis contained in the regulators assessment; or if those representatives could not reasonably have produced their own quantified assessment, RPC should be satisfied that they

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<sup>7</sup> The RPC is an independent Non-Departmental Public Body comprising eight independent experts with a wide range of experience and current knowledge of business, employee and consumer issues. Its main role is to scrutinise the evidence and analysis contained in Impact Assessments which Departments prepare in respect of changes to regulations, and publish Opinions which explain the outcome of this scrutiny, prior to Ministers making final decisions.

have a credible case in respect of an issue with substantial impact.

- The case should be supported by representatives of a significant group of businesses already in the sector, or credible potential new entrants.

8.7. The RPC will not consider references which it believes to be vexatious. It will not review any proposed change more than once.

8.8. Following investigation, the RPC will determine the best means of resolving the dispute, which may include arbitration.

8.9. In the event of arbitration, RPC will review the assessments provided by the regulator and business representatives, and decide which of them is more consistent with the evidence. RPC will not make any comment on the proposed changes in regulatory activity, but it may choose to make comments on the assessment methodology or the approach to engaging business representatives.

8.10. The regulator should publish the RPC's decision online. If RPC's finding is that the regulator's assessment was substantially mis-stated, the regulator should

- Reconsider the proposed change in regulatory activity, taking into account the business representatives' assessment;
- Send to relevant Ministers and the BRE the RPC's conclusion, together with an explanation of what action it proposes to take in the light of the RPC's decision.

8.11. There will be no changes to the role of the RPC in assessing Impact Assessments for legislative changes undertaken by Departments.

## 9. Reporting to Government

9.1. Regulators will be asked to **submit brief returns** on their implementation of this guidance. Returns should be sent to BRE, with a copy to the regulator's parent Department's Better Regulation Unit.

9.2. Until October 2014 a separate return on each draft or final assessment should be submitted as soon as it is posted online, so that BRE can share early good practice with other regulators.

9.3. From November 2014 returns should only be submitted on individual assessments with an impact of more than £5 million, whether positive or negative.

- 9.4. A summary of assessments will be published with the Statement of New Regulation, which is published at six-month intervals in July and December. Before each Statement – probably in May and October – each regulator should submit a summary return covering all the assessments it has posted online since the previous summary return, including those for which it has already made individual returns. A nil return will be required if no Assessments have been made in the period.
- 9.5. Returns should cover, for each draft and final Assessment:
- Title of Assessment;
  - Short description of the change in plain English;
  - Whether draft or final;
  - Total estimated financial impact on business, with the year used as the price base;
  - The expected implementation date;
  - Whether the Assessment deals with Red Tape Challenge implementation;
  - A link to the Assessment online; and
  - If subject to RPC review, a link to the RPC’s findings.
- 9.6. Where regulators work together to change policies or practices they should decide between them whether they should assess changes, and consult businesses, jointly or separately. They should ensure that their returns to BRE do not double-count any financial impacts.

### **Better Regulation Executive**

**Contact** [betterregulation@bis.gsi.gov.uk](mailto:betterregulation@bis.gsi.gov.uk)



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**BIS/13/1040**

# SIMS RABONE LANE METALS RECYCLING FACILITY

Assessment of BAT for Emissions to Sewer.

JER9144

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2

23 October 2024

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## Document status

Version	Revision	Authored by	Reviewed by	Approved by	Review date
0	0	Rayhela Ahmed Adrian Green	Jennifer Stringer	-	5 October 2024
0	1	Rayhela Ahmed	Jennifer Stringer	-	7 October 2024
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1	2	Rayhela Ahmed Adrian Green	Jennifer Stringer	Jennifer Stringer	23 October 2024

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## Approval for issue

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23 October 2024

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# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 Sims Group UK Limited applied for a variation in 2022 to Environmental Permit (ref EPR/ZP3032WF) issued for the metals recycling facility at Rabone Lane, Smethwick. The variation sought to allow continued acceptance and treatment of waste electrical and electronic equipment (WEEE) waste codes which had been reclassified from non-hazardous to hazardous and therefore sought to include EWC codes 16 02 15\*, 19 02 04\*, 19 12 11\* in the permit in addition to the codes already in the permit. The WEEE wastes falling under EWC code 16 02 15\*, 19 02 04\*, 19 12 11\* and 20 01 35\* are the same wastes that had previously been accepted under EWC code 16 02 14, 16 02 16, 19 12 12, 20 01 36.
- 1.1.2 As a result of the variation, whilst the total waste stored at the site was not changing, the maximum total amount of hazardous waste to be stored at the facility increased to 500 tonnes. Treatment of the hazardous wastes at the Rabone Lane site includes shredding. The daily treatment capacity of the shredder is 2,640 tonnes, based on 12 hours operation. This capacity is aggregated for hazardous and non-hazardous wastes.
- 1.1.3 The acceptance, storage and treatment of the hazardous wastes triggered the need for the following additional installation activities to be included as part of the variation:
- Section 5.3 A(1) a) (ii), Disposal or recovery of hazardous waste, (a) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:
    - (ii) physico-chemical treatment
  - Section 5.6 A(1) a), Temporary or underground storage of hazardous waste, (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Section 5.1, 5.2 and 5.3 and paragraph (b) of this Section except:
    - (i) Temporary storage, pending collection, on the site where the waste is generated, or
    - (ii) Activities falling within Section 5.2
- 1.1.4 Given new installation activities were being included in the permit, to inform the permit determination an assessment of the proposed changes against Waste Treatment Industries best available techniques (BAT) conclusions<sup>1</sup> was required. BAT 20 sets out BAT associated emission levels (BAT-AELs) for emissions to water as detailed in Table 1-1 below. Trade effluent from the Rabone Lane site are discharged to sewer and treated prior to release to surface water and therefore are considered an indirect release.

**Table 1-1 – BAT-associated emission levels (BAT-AELs) for indirect discharges to a receiving water body**

Substance/Parameter	BAT-AEL (1)	Waste treatment process to which the BAT-AEL applies
Hydrocarbon oil index (HOI)	0.5. 10 mg/l	Mechanical treatment in shredders of metal waste Treatment of WEEE containing VFCs and/or VHCs

<sup>1</sup> Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment under Directive 2010/75/EU of the European Parliament and of the Council

Substance/Parameter		BAT-AEL (1)	Waste treatment process to which the BAT-AEL applies
			Re-refining of waste oil Physico-chemical treatment of waste with calorific value Water washing of excavated contaminated soil Treatment of water-based liquid waste
	Free cyanide (CN <sup>-</sup> ) (3)	0.02. 0.1 mg/l	Treatment of water-based liquid waste
	Adsorbable organically bound halogens (AOX) (3)	0.2. 1 mg/l	Treatment of water-based liquid waste
Metals and metalloids (8)	Arsenic (expressed as As)	0.01. 0.05 mg/l	Mechanical treatment in shredders of metal waste Treatment of WEEE containing VFCs and/or VHCs Mechanical biological treatment of waste Re-refining of waste oil Physico-chemical treatment of waste with calorific value Physico-chemical treatment of solid and/or pasty waste Regeneration of spent solvents Water washing of excavated contaminated soil
	Cadmium (expressed as Cd)	0.01. 0.05 mg/l	
	Chromium (expressed as Cr)	0.01. 0.15 mg/l	
	Copper (expressed as Cu)	0.05. 0.5 mg/l	
	Lead (expressed as Pb)	0.05. 0.1 mg/l (4)	
	Nickel (expressed as Ni)	0.05. 0.5 mg/l	
	Mercury (expressed as Hg)	0.5. 5 µg/l	
	Zinc (expressed as Zn)	0.1. 1 mg/l (5)	
	Arsenic (expressed as As)	0.01. 0.1 mg/l	Treatment of water-based liquid waste
	Cadmium (expressed as Cd)	0.01. 0.1 mg/l	
	Chromium (expressed as Cr)	0.01. 0.3 mg/l	
	Hexavalent chromium (expressed as Cr(VI))	0.01. 0.1 mg/l	
	Copper (expressed as Cu)	0.05. 0.5 mg/l	
	Lead (expressed as Pb)	0.05. 0.3 mg/l	
	Nickel (expressed as Ni)	0.05. 1 mg/l	
	Mercury (expressed as Hg)	1. 10 µg/l	
	Zinc (expressed as Zn)	0.1. 2 mg/l	

(1) The averaging periods are defined in the General considerations.  
(2) The BAT-AELs may not apply if the downstream waste water treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.  
(3) The BAT-AELs only apply when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3.  
(4) The upper end of the range is 0.3 mg/l for mechanical treatment in shredders of metal waste.  
(5) The upper end of the range is 2 mg/l for mechanical treatment in shredders of metal waste.

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- 1.1.5 At the time of the application on the basis that the site was not changing the nature of materials received and stored at the site, the permitted quantities and treatment of the wastes concerned an assessment of the requirements of BAT 20 was excluded as the nature of the discharge would not change. Consideration of BAT 20 was therefore left as a matter for the Regulation 61 response.
- 1.1.6 The EA did not accept this position and the varied permit incorporated the BAT-AELs for indirect emissions within Table S3.2 and requires the site to operate within these limits. Quarterly sampling and analysis of the effluent indicates that the emission limits may be exceeded under the current site drainage arrangements.
- 1.1.7 The new emission limits within the permit are in line with the upper end of the BAT AEL range, not taking into account footnotes 4 and 5 of the BRef<sup>9</sup>, specified for indirect emissions within the waste treatment industries BAT conclusions. Whilst the BAT conclusions provide separate BAT AELS for direct and indirect emissions the limits for metals are the same. For the Rabone Lane site the emission limit values (ELVs) that are applied, despite the release passing via the Minworth STW would therefore be the same if a direct emission to water was proposed. It is also noted that the permit applies the emission limits to zinc and lead unless agreed otherwise by the Environment Agency.

## 1.2 Purpose and Layout of this Document

- 1.2.1 The varied permit including the BAT AELs applicable for indirect discharges now includes limits for certain metals which the site cannot currently comply with. This report reviews available options for management of the trade effluent discharge to bring the site into compliance and considering both the environmental impacts and costs associated with these options provides a review of candidate BAT.
- 1.2.2 This report addresses the BAT options appraisal and provides a comparison of the technologies for treating wastewater to reduce emissions to water, as set out in BAT 20 of the Waste Treatment Industries best available techniques (BAT) conclusions<sup>1</sup>.
- Section 2 describes the existing arrangements for management of rainwater run-off from the site.
  - Section 3 details the approach to the assessment and in particular the options considered within this assessment.
  - Section 4 details the assessment and its outcome
  - Section 5 provides a summary.

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## 2 EXISTING DISCHARGES AND TREATMENT

- 2.1.1 The permitted activities at the Rabone Lane site comprise the treatment of metal wastes which include metal recycling, End of Life Vehicles (ELV) storage, depollution and dismantling, storage of hazardous wastes, metals washing and WEEE treatment. Both storage of wastes and treatment within a mechanical shredder and fragmentiser are carried out externally. Only pre-treatment of hazardous WEEE waste is carried out under cover. Work is in progress to cover external bays for storage of shredded non-metallic wastes. Site housekeeping measures are in place to minimise particulate (including metals) deposits across the site and the potential for its mobilisation and discharge via rainwater run-off.
- 2.1.2 The site is served with impermeable surfacing and a sealed drainage system. The site currently manages surface water run-off using a system of drainage gullies. The drainage gullies connect into an industrial oil separator (Class 1 full retention interceptor), which is an underground gravity-based system, prior to leaving the site from the northern boundary into the Foundry Lane foul sewer. This discharge point is emission point S2<sup>2</sup> within the permit. The sewer then leads to the Minworth sewage treatment works (STW) which is operated by Severn Trent Water, before the treated effluent is discharged into the River Tame.
- 2.1.3 The on-site drainage system is historic and was installed when the site was built, and prior to occupation by Sims in July 2011. The oil separator is designed to remove oil and grease by gravity separation of free oil, using separation equipment. Historically, there has been no other treatment of the discharge at the facility before the effluent is discharged to the Minworth wastewater treatment works. A simple filtration system is currently being trialled at the facility and further information about this has been provided in sections 3.3.6 to 3.3.9.
- 2.1.4 Oil-water separation is applied to remove oil, grease and other non-soluble liquids lighter than the aqueous phase from wastewater at sites where oil or petroleum products may be present in the effluent. The permitted activities at the site do not produce process effluents or process waste waters. The water discharge is made up of rainwater run-off but includes run off from areas of the site where waste storage and treatment activities are carried out on the external hardstanding. Rainwater un-off from these areas will entrain particulate matter, metals and oils.
- 2.1.5 As the discharge is limited to rainwater run-off the discharge from the site is not continuous and is dependent on the rainfall events, both in duration and volume.
- 2.1.6 A trade effluent discharge consent (Consent No. 008675V, issued on 11th May 2016 by Severn Trent Water) is in place authorising this discharge into the foul sewer.
- 2.1.7 Site surfacing and drainage is visually inspected on a regular basis and at least weekly by site operatives. Drainage is thoroughly inspected by an external contractor 6 monthly to ensure that there are no internal blockages.
- 2.1.8 There is a monitoring plan for emission point S2 which was agreed with the Environment Agency prior to the issue of the variation. The plan requires spot sampling to be taken quarterly in January, April, July and October, depending on rainfall. Samples are sent to an appropriate ISO, UKAS and MCERTS accredited laboratory for analysis. The sampling methodology has been set out clearly within the plan to ensure consistency when collecting samples. Since the permit variation, the monitoring frequency has been increased and an updated monitoring plan has been produced. This has not been provided to the EA for approval as yet.

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<sup>2</sup> There is a discharge point for wastewater which originates from the on-site amenities (kitchen and toilets) and discharges to the foul sewer at Rabone Lane (S1). This point is not subject to the need to comply with BAT conclusions requirements or emission limits and is therefore excluded from consideration in this document.



## Minworth Sewage Treatment Works

- 2.1.9 Minworth STW comprises 22 No. primary settlement tanks, 28 No. activated sludge lanes and 62 No. final settlement tanks. Final effluent is split and discharged to the River Tame at Water Orton (SP 17406 91455) and Coleshill (SP 20039 91371). Phosphorus removal is affected through biological nutrient removal within the modified ASP lanes with top-up-chemical dosing (using ferric sulphate) deployed as required.
- 2.1.10 Flows in excess of 12,400 l/s are directed to the storm tanks (with total capacity of 127,264 m<sup>3</sup>) then discharged to the River Tame at SP 16479 91529. Sampling of the settled storm sewage takes place at SP 16276 91757.
- 2.1.11 Severn Trent Water Limited operate the Minworth STW under an environmental permit (T/10/3621/R) issued by the EA. Table S3.1 in the permit for the Minworth STW permit specifies the emission limits that apply to the treated wastewater discharged from the facility and include the limits on flow and metals. Note: emission limits for a wider suite of parameters are included in the permit but those relevant to this assessment are summarised in Table 2-1 below. The same emission limits for the parameters listed apply to each the two outfalls from the Minworth STW.

**Table 2-1 – Minworth STW Permit Emission Limits**

Parameter	STW Outfall 1	STW Outfall 1
Total daily flow	225,000 m <sup>3</sup> /day	225,000 m <sup>3</sup> /day
Total iron as Fe	3,500 µg/l*	3,500 µg/l*
Total iron as Fe	8,000 µg/l*	8,000 µg/l*
Dissolved zinc	122 µg/l	122 µg/l
Dissolved nickel	24 µg/l	24 µg/l
Antimony	5 µg/l	5 µg/l
Arsenic	12 µg/l	12 µg/l
Cadmium	1 µg/l	1 µg/l

\* Applicability of these limits is subject to conditions in the permit

## Previous H1 Assessment

- 2.1.12 The releases of site drainage to sewer, and ultimately into the River Tame, following treatment at the Minworth works were previously assessed using the Environment Agency H1 software tool in 2018. The principal contaminants of concern associated with process areas on the Rabone Lane facility included the following:
- Heavy metals;
  - Suspended solids;
  - Dissolved phase petroleum hydrocarbons and discrete phase oils and greases;
  - Other organic compounds that may be present in minor quantities (e.g. solvents, PAHs etc); and
  - Reduced forms of nitrogen (measured as ammoniacal nitrogen) associated with any organic material entrained in the site runoff.
- 2.1.13 The freshwater Environmental Quality Standards (EQS) used within the inventory of the H1 Assessment Tool for the contaminants of concern relate to the dissolved phase concentrations, which is relevant to their respective eco-toxicity in the receiving watercourse. Whereas the TEC limits relate to total concentrations, associated with the suspended sediment load entrained with site run-off.

- 2.1.14 The results of Test 1 of the H1 assessment showed no pollutants were screened out. The results of Test 2 of the H1 assessment showed all pollutants were screened out.
- 2.1.15 On the basis of the 2018 H1 assessment, the potential contaminants of concern identified in the surface water discharge to sewer on the Rabone Lane facility were screened when using annual average EQS and the mean effluent discharge rate and it was concluded that the risk to the receiving water was insignificant.

### Review of Emissions Performance

- 2.1.16 Water quality at the point of discharge to sewer (S2) on the Rabone Lane facility is monitored monthly. The monitoring is undertaken in accordance with the monitoring plan which was submitted to and accepted by the Environment Agency on 05/01/2017 (Appendix A). The monitoring plan sets a frequency of quarterly monitoring. However, as per paragraph 2.1.8 Sims have been carrying out monthly monitoring since the permit variation was issued. The monitoring suite agreed for the site is summarised in Table 2-2.

**Table 2-2 – Monitoring Suite for the Rabone Lane facility (S2)**

Parameter	Unit
Suspended Solids	mg/l
COD 1 hr	mg/l
pH	unit
TOC as C	mg/l
Ammoniacal Nitrogen	mg/l
Iron total as Fe	mg/l
Iron filtered as Fe	mg/l
Aluminium total as Al	mg/l
Aluminium filtered as Al	mg/l
Cadmium total as Cd	mg/l
Cadmium filtered as Cd	mg/l
Chromium total as Cr	mg/l
Chromium filtered as Cr	mg/l
Copper total as Cu	mg/l
Copper filtered as Cu	mg/l
Lead total as Pb	mg/l
Lead filtered as Pb	mg/l
Nickel total as Ni	mg/l
Nickel filtered as Ni	mg/l
Zinc total as Zn	mg/l
Zinc filtered as Zn	mg/l
Ammoniacal Nitrogen	mg/l
NVM	mg/l
Phosphorus total as P	mg/l
Tin total as Sn	mg/l
Tin filtered as Sn	mg/l
Arsenic total as As	mg/l
Arsenic, filter as As	mg/l
Mercury Hg	mg/l

Parameter	Unit
Mercury, Filtered as Hg	mg/l

- 2.1.17 The site-specific water quality monitoring dataset for spot samples taken in 2022, 2023 and 2024 is summarised in Table 2-3. The summary table presents the maximum, minimum and mean concentration observed for each the substance contained on the on the Environmental Permit for the facility. The full dataset is provided in Appendix B.
- 2.1.18 Table 2-3 summarises the number of times the new BAT . AELs would have been exceeded over that monitoring period and whether the mean and minimum concentration exceeds the new BAT-AEL. It should be noted that the new BAT-AELs for metals included in the recently varied Environmental Permit did not apply over most of this period. The sampling protocol agreed with the EA provides for comparison of the sample results with the limits set in the trade effluent consent. In addition, the BAT-AELs are measured as total concentrations as opposed to dissolved concentrations and/or bioavailable metal concentrations.
- 2.1.19 It can be seen from Table 2-3 that the maximum total concentration for the metal cadmium, chromium, copper, lead and zinc do exceed their respective BAT-AEL. However, the BAT-AEL is exceeded infrequently for cadmium, chromium and copper (between 1 and 6 times out of 29 samples), with their respective mean concentrations remaining below the BAT-AEL. Routine exceedance of the new BAT-AEL limit is only seen for lead and zinc (in 28 of 29 samples for both metals). The arithmetic mean concentration for lead and zinc also exceeds their respective BAT-AEL. The mean concentration does not exceed the BAT-AEL for any other metal or HOI. It can therefore be concluded that from a compliance perspective the greatest concern regarding the discharges from the Rabone Lane facility relate to lead and zinc concentrations.

**Table 2-3 – Summary Discharge Water Quality**

Parameter	Unit	No. of Analyses	No. Analyses Above LoD*	BAT - AEL (Permit) [Total Concentration]	Maximum Concentration	No. > AEL	Minimum Concentration	Mean Concentration**	Mean > AEL
HOI/Total EPH	mg/l	14	10	10	21	1	0.0021	2.794	No
Arsenic (Total)	mg/l	15	13	0.05	0.0123	0	0.0019	0.0038	No
Arsenic (Dissolved)	mg/l	15	13		0.0021	0	0.0005	0.0011	No
Cadmium (Total)	mg/l	29	29	0.05	0.0773	3	0.00233	0.0283	No
Cadmium (Dissolved)	mg/l	24	19		0.00108	0	0.00002	0.00047	No
Chromium (Total)	mg/l	29	29	0.15	0.156	1	0.00298	0.039	No
Chromium (Dissolved)	mg/l	24	19		0.002	0	0.0003	0.0010	No
Copper (Total)	mg/l	29	29	0.5	1.57	6	0.013	0.428	No
Copper (Dissolved)	mg/l	24	17		0.0235	0	0.0004	0.0078	No
Lead (Total)	mg/l	29	29	0.1	7	28	0.0509	0.976	Yes
Lead (Dissolved)	mg/l	24	20		0.052	0	0.0003	0.007	No
Nickel (Total)	mg/l	29	29	0.5	0.407	0	0.0182	0.109	No
Nickel (Dissolved)	mg/l	25	24		0.2	0	0.0018	0.031	No
Mercury	mg/l	13	6	0.005	0.00115	0	0.00022	0.00031	No
Mercury (dissolved)	mg/l	8	4		0.0011	0	0.00023	0.00040	No
Zinc (Total)	mg/l	29	29	1	22.3	28	0.563	5.819	Yes
Zinc (Dissolved)	mg/l	25	24		1.39	3	0.012	0.353	No
Total Suspended Solids	mg/l	29	29	-	1230	-	53	274.200	-

\*LoD denotes the analytical Limit of Detection

\*\*Arithmetic mean calculated by assuming a concentration of (0.5xLoD) for samples with a reported concentration of below the LoD

Red text denotes limit that is exceeded by site data

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- 2.1.20 Note 1 in Table S3.2 of the Environmental Permit states that for monitoring of emissions to the sewer the relevant reference period should be:
- In the case of **continuous discharge**, daily average values (i.e. utilising 24-hour flow-proportional composite samples); or
  - In the case of **batch discharge**, average values over the release duration taken as flow-proportional composite samples, or, provided that the effluent is appropriately mixed and homogeneous, a spot sample taken before discharge.
- 2.1.21 The discharge to sewer at the facility comprises storm water run-off generated by rainfall events within the site boundary. The discharge must therefore be considered a batch discharge as opposed to a continuous discharge with a batch reflecting a single rainfall event.
- 2.1.22 It is generally accepted that runoff generated from hardstanding area subject to active operations (e.g. highways, industrial sites etc.) is characterised by initial period characterised by elevated concentration of sediment load and certain potential contaminants (the first flush). This is followed by a decline in concentrations at later times during the rainfall event as sediment is washed out and the intensity of the rainfall event and associated run-off subsides. This effect can be especially marked during rainfall events following prolonged periods of dry weather. This effect means that the water discharged from the Rabone Lane facility cannot be considered mixed and homogeneous over a single batch (i.e. a single rainfall event), thus the results of spot sampling are **not** appropriate when assessing compliance against the BAT-AELs in Table S3.2 of the Environmental Permit. Instead, Note 1 states that flow-proportional composite samples should be used over a single batch for compliance purposes. Given that only spot sampling has been undertaken to date, it is considered that the long-term mean concentration for metals provided Table 2-3 is likely to be more representative of the likely outcome of a flow-proportional sampling strategy and hence compliance with the new BAT-AELs. As indicated previously (see Table 2-3), lead and zinc are two contaminants identified in the surface water runoff discharged from Rabone lane facility at concentrations with a mean that exceeds the BAT-AEL.
- 2.1.23 It is also noted that Note 3 of Table S3.2 in the Environmental Permit states that the limits (BAT-AELs) for lead and zinc apply unless agreed otherwise by the Environment Agency. Although the basis for such an agreement is not known at this stage, this note implies there is some latitude from a regulatory perspective with regards to the limits for these metals. It would also seem likely that there will be the potential to agree new limits for lead and zinc, given the water is discharged to the Minworth STW where it will be subject to additional treatment.

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## 3 APPROACH TO THE ASSESSMENT

### 3.1 Introduction

- 3.1.1 The existing arrangements for managing discharges from the Sims Rabone Lane site as described in Section 2 have been subject to a screening assessment which concluded that the impacts on the receiving water were insignificant. However, due to the BAT AELs introduced via the Waste Treatment Industries BAT Conclusions the discharges from the site, prior to discharge to the Minworth STW needs to comply with the BAT AEL limits which are now included in the permit, albeit noting the permit does allow some flexibility to agree otherwise with the EA for lead and zinc.
- 3.1.2 If the Rabone Lane facility is to operate within the permit as issued alternative techniques to achieve compliance with be required. These will either require (i) removal of the source of contamination to prevent this getting into the rainfall run-off; or (ii) treatment of the rainwater to remove entrained contamination.
- 3.1.3 The nature of the contamination arises from rainwater runoff from the site draining over waste storage and processing areas of the site. The source of metal contamination could therefore be minimised by covering these areas or housing within a building or buildings. Whilst this option could minimise the potential for contamination of the rainwater run-off there are practical difficulties which would impede day to day activities at the site in doing so. Having an open site allows for the various plant and machinery to move through the site with ease.
- 3.1.4 Housing activities within a building at this time is not considered feasible, practical and would incur significant costs and therefore is discounted at this stage. A roof structure or building over the site or areas of the site would result in difficulties with manoeuvring large vehicles such as lorries and plant items are large meaning any structure would be high. Even with a roof structure, especially where high to accommodate plant a run-off could occur as a result of rainwater runoff around the site or ingress from any open sides. Sims have already implemented measures that assist with minimising rainwater run-off from there treatment plant such as including enclosures on the treatment plant (see paragraphs 2.1.1 and 5.1.4 for further detail).
- 3.1.5 On this basis this assessment has focussed on treatment of the run-off.

### 3.2 Available Treatment Techniques

- 3.2.1 BAT 20 sets out the techniques for treating wastewater that can be considered as BAT. The different technologies are targeted at a range of pollutants including acids, alkalis, biodegradable organic compounds, solvents etc. The contaminants of concern found within the wastewater discharge leaving the Rabone Lane site are metals. Therefore, techniques which are relevant for treating metal contamination have been considered and those which do not relate to treating metal contamination such as neutralisation, distillation, stripping etc, have been omitted.
- 3.2.2 The techniques identified by BAT 20 which are suitable for treating metals include:
- Sedimentation/settlement
  - Coagulation and flocculation
  - Filtration
  - Flotation
  - Precipitation
  - Ion exchange
  - Activated sludge

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3.2.3 It is noted that treatment may use a combination of these techniques. The following considers each of the techniques from BAT 20 in turn.

## Sedimentation/Settlement

- 3.2.1 Sedimentation separates suspended particles within waste water by gravitational settling. It is suitable for treating suspended solids and particulate-bound metals in wastewater. The resulting sludge requires removal and floated material is skimmed from the water surface.
- 3.2.2 Tanks are available in various designs rectangular, circular, hopper bottom tanks and sludge removal may be carried out by an appropriate scraper or similar mechanical device. Lamina or tube settlers have plates which enlarge the sedimentation surface. The size of tanks should provide the necessary residence time which is typically about 1.5 to 2.5 hours.
- 3.2.3 The Rabone Lane site already has an oil separator in use, which will remove any interfering substances to ensure optimum settlement.
- 3.2.4 Waste produced by sedimentation can include the settled sludge and skimmed scum. This waste might contain hazardous compounds. These compounds can be carbonates, fluorides, sulphides or hydroxides (or oxides) of heavy metals, oily scum, etc.
- 3.2.5 Based on published research on the effectiveness of settlement to remove metals removal efficiencies for metals typically between 15-75% remove are reported<sup>3</sup>, albeit noting much of this data relates to STW scale facilities. Although for total suspended solids, the efficiency is 60-90% (assuming a clarifier unit is installed) and for settleable solids 90-95%. The BRef indicates that sedimentation can result in 70% removal of inorganic mercury and between 98% removal of cadmium and its compounds. These removal rates are noted as being dependent on the operating conditions. No performance data for lead or zinc is specified in the BRef.
- 3.2.6 Chemical additives to assist with settlement can be combined with this technique to increase its effectiveness. Coagulant and flocculant use has been discussed in paragraphs 3.2.14 to 3.2.25.
- 3.2.7 Pumps and the sludge/scum removal system may need to be housed to prevent noise emissions creating nuisance off site.
- 3.2.8 There could be the potential for odour emissions from the sediment tank and /or any coagulation/flocculation tanks, although it is unlikely given the inconsistent flow of wastewater, which will originate from the site surface. Emissions can be reduced by placing coverings or lids over tanks.
- 3.2.9 Operational costs associated with this technique relate to electricity usage, the supply of coagulants/flocculants and sludge disposal.
- 3.2.10 Investment costs are closely related to the size (surface) of the unit used to treat the wastewater volume. Costs for a sedimentation tank can be in the range of EUR 300,000<sup>4</sup> per cubic metre and a 5m diameter scraper blade can be in the region of EUR 250,000. An economy of scale effect is evident. Large tanks cannot easily be constructed in dense urban areas or industrial sites which already have commercial activities taking place.
- 3.2.11 This technique will require above ground plant, so changes to existing drainage system with a new system of pumps bringing wastewater above ground and moving it between tanks will require planning and installation.

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<sup>3</sup> Sylwan, I.; Thorin, E. Removal of Heavy Metals during Primary Treatment of Municipal Wastewater and Possibilities of Enhanced Removal: A Review. *Water* 2021, 13, 1121. <https://doi.org/10.3390/w13081121>

<sup>4</sup> Table 3.13, Best Available Techniques (BAT) Reference Document for Waste Treatment [https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC113018\\_WT\\_Bref.pdf](https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC113018_WT_Bref.pdf)

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3.2.12 Settlement of particles is limited to those particles which are large enough to be settleable, otherwise with metal for example, coagulation and/or flocculation chemicals need to be applied, which comes at an additional cost and requires additional plant.

3.2.13 This technique is not restricted by solid concentration provided the aqueous phase is still separable.

## Coagulation and Flocculation

3.2.14 For particles which cannot be separated by simple gravitational means, e.g. when they are too small and their density is too close to that of water or they form colloids, chemical additives can be added to cause the solids to settle. Coagulation and flocculation are examples of treatment processes where settlement is assisted by chemical additives.

3.2.15 Common coagulants are:

- aluminium sulphate;
- ferric sulphate;
- ferrous sulphate;
- ferric chloride;
- lime;
- sodium aluminate;
- polyaluminium chloride;
- polyaluminium sulphate; and
- cationic organic polymers.

3.2.16 The first four will lower the alkalinity and pH of the solution while the sodium aluminate will add alkalinity and raise the pH. Polymers (anionic or cationic) can be used as coagulant aids together with the inorganic coagulants. Proper contact time in the rapid-mix chamber is typically one to three minutes.

3.2.17 The need for rapid mixing with coagulation is carried out by:

- simultaneous dosing of coagulants via multiple injection points;
- plug flow systems, where applicable;
- a mixer unit or mixing at the point where the coagulant is added, static mixers or orifices.

3.2.18 A high-energy mix is not necessary if liquids are being coagulated, as long as there is sufficient contact time to ensure good dispersion mixing. Also, for liquids, this can be achieved in a flow line rather than a tank.

3.2.19 Flocculation is carried out by adding chemical additives, so that microfloc particles bond to produce larger flocs caused by colliding together. Chemicals used to aid flocculation include ferrous and ferric salts, aluminium sulphate, polymers (cationic, anionic or non-ionic) and polyorganosulphides.

3.2.20 The use of a mixing chamber enables flocculation to be used as part of the treatment. Picket fence or low-speed mixers can be used, which enables hydraulic mixing within the fluid as it flows through the tank. It is possible to partially recycle the floc back into the flocculant tank.

3.2.21 Following coagulation and/or flocculation further treatment techniques such as sedimentation, air flotation or filtration are required to separate the solid fraction.

3.2.22 Flocculation and coagulation techniques are used to treat suspended solids and particulate-bound metals which makes this a suitable technique for Rabone Lane.



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- 3.2.23 As mentioned in paragraph 3.2.11, modifying the current drainage system will require above ground tanks and pumping systems.
- 3.2.24 Storage facilities for the coagulant or flocculant chemicals and the sedimented sludge will need to be installed at the site.
- 3.2.25 Operating costs are dependant on the coagulation and flocculation agents and the disposal costs for the resulting sludge. The cost of chemicals is reported to be in the range of EUR 0.15. 5 per kg (chemical dosage is usually in the range of 0.5. 100 mg/l). The removal cost of the sludge is around EUR 500 per tonne of dry matter. Energy usage for the operation of the plant should also be considered.

## Filtration

- 3.2.26 Filtration work by separating solids from wastewater by passing them through a porous medium, e.g. sand filtration, microfiltration and ultrafiltration. This technique can be combined with techniques such as sedimentation and flotation. Filters usually require a cleaning operating, such as backwashing with the reverse flow of fresh water and the accumulated material returned to the sedimentation tank. Filtration is often used as the final separation stage after sedimentation processes or flotation, these techniques are discussed below.
- 3.2.27 Filter systems come in different forms which include:
- the granular-medium filter, or sand filter, which is widely used as a wastewater treatment device (the medium of sand filters need not be literally sand), mainly used with low solid content,
  - the gravity drum filter, used for sewerage treatment and the removal of activated sludge flocs, its efficiency is dependent on the screen fabric,
  - rotary vacuum filter, well-suited to precoat filtration, which is used for oily sludge dewatering and slop de-emulsification,
  - membrane filter,
  - the belt filter press, which is largely used for sludge dewatering, but also for liquid/solid separation operations,
  - filter press, which is usually used for sludge dewatering, but also for liquid/solid operations, suitable for high solid content.
- 3.2.28 Blockage of the filter caused by finer solids can be averted by using filter aids, such as inert, readily filterable granular material. A filter aids can form a layer that is permeable for the filtrate and at the same time carry out the functions of a loose filter cake. The filter aid retains the loose particles.
- 3.2.29 Examples of filter aids are diatomaceous earth perlites, Fuller's earth powdered glass, coal preparations, cellulose fibres, wood pulp, paper stock, bagasse, talc and plastics.
- 3.2.30 Sand filters have been shown to provide abatement levels of 50-99.99% for suspended solids, 68% for dissolved metals, 68% for metal particulates, and is dependent on the type of filter aid(s) used.
- 3.2.31 Backwash water from the process can be fed back into the sedimentation tank. In oily water removal, the backwash water is typically 4. 7 % of the forward processed flow volume.
- 3.2.32 Costs associated with sand filtration relate to filter aids, water and energy usage.
- 3.2.33 As mentioned previously in paragraph 3.2.11, modifying the current drainage system will require above ground tanks and pumping systems. The use of housing for pumps will reduce emissions of noise. If the filtration system is installed sub-surface, noise and odour emissions are unlikely to

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create nuisance outside the site boundary. However, a sub-surface system will require excavation works, civil engineering and costs associated with disposal of excavation spoil. These points have been discussed further in Section 4.3.

- 3.2.34 A simple filtration system can be installed with costs at less than EUR 1/m<sup>3</sup>. However, for flows greater than 50 m<sup>3</sup>/hour, an industrial filtration system will be appropriate. This can cost in the region of EUR 50,000 for the tank<sup>5</sup>. Additional costs would be incurred for installing appropriate power connections and civil engineering works required to install the system as an above ground filtration system. Where the tank and associated pipework and power connections are installed sub-surface, further costs for excavation would be incurred.

## Flotation

- 3.2.35 Flotation techniques separate solid or liquid particles from wastewater by attaching them to fine gas bubbles, usually air. The buoyant particles accumulate at the water surface and are collected with skimmers.
- 3.2.36 Suspended solids and particulate-bound metals in wastewater can be treated by filtration and flotation techniques. This technique can be used in conjunction with flocculation. The flotation process can be aided with additives, such as aluminium and ferric salts, activated silica and various organic polymers. Flotation is applied when sedimentation is not an appropriate technique, such as when particulates have poor settling characteristics or similar density to water. Flotation can be used to remove heavy metals from wastewater.
- 3.2.37 There are three methods of flotation, distinguished by the way the gas (usually air) is added:
- vacuum flotation, where gas is dissolved at atmospheric pressure, followed by a pressure drop to allow the formation of bubbles,
  - induced gas flotation (IGF)/induced air flotation (IAF), where fine bubbles are drawn into the wastewater via an induction device such as a Venturi or orifice plate,
  - dissolved gas flotation (DGF)/dissolved air flotation (DAF), where pressurised gas is dissolved into the wastewater, or part of the total wastewater, and subsequently released to form small bubbles.
- 3.2.38 Flotation can achieve abatement levels of 85-98% for suspended solids.
- 3.2.39 The separated material will require disposal off site of as waste. The amount of skimmed material produced is dependent on runoff produced and the amount of coagulant and flocculant chemicals used during treatment.
- 3.2.40 Operational costs relate to the energy usage, which can be around 21 kWh/1,000m<sup>3</sup>, and the use of flocculant/coagulant agents.
- 3.2.41 As mentioned in previous sections, modifying the current drainage system will require above ground tanks and pumping systems. This activity can result in the release of noise and odour emissions. The use of housing for pumps will reduce emissions of noise. It is unlikely odour will be an issue due to the nature of the runoff being rainfall dependant.
- 3.2.42 Installation costs for a DAF system are dependent on factors such as the use of precipitation/flocculation, dewatering units, pumps etc. Using flow rates, the investment costs can be in the region of £0.5 million and annual operating costs of £50,000-£80,000 for a system which handles up to 1,000m<sup>3</sup>/hour.

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<sup>5</sup> Best Available Techniques (BAT) Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector, Economics associated with filtration, Table 3.24, [https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW\\_Bref\\_2016\\_published.pdf](https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf)

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## Precipitation

- 3.2.43 Precipitation technology is the conversion of dissolved pollutants into insoluble compounds by adding precipitants. The solid precipitates formed are subsequently separated by sedimentation, air flotation or filtration.
- 3.2.44 The use of hydroxide precipitation for treating heavy metals in wastewater can on occasions cause some metal hydroxides to redissolve upon increasing the pH value above a certain critical value, known as 'amphoterism'. When the wastewater contains a mixture of heavy metals, the pH ideally suited for efficient removal of one metal may be unfavourable for efficient removal of the others. Alkaline conditions suit the treatment of heavy metals. Therefore, due to the range of metals likely to be present in the Rabone Lane site runoff, this technique is may not be effective at treating all the metal contaminants present in the waste water, this technique will not be considered further.

## Ion Exchange

- 3.2.45 Ion exchange is the retention of undesired or hazardous ionic constituents of wastewater and their replacement by more acceptable ions using an ion exchange resin. The pollutants are temporarily retained and afterwards released into a regeneration or backwashing liquid.
- 3.2.46 This technology is suitable for pollutants such as metals which are ionic dissolved non-biodegradable or inhibitory pollutants.
- 3.2.47 Damage to the microporous granule ion exchange resins can be caused by certain contaminants such as iron, manganese and copper. As the Rabone Lane site effluent will contain these contaminants, this technique is therefore not considered suitable and will not be considered further.

## Activated Sludge Process

- 3.2.48 Activated Sludge Process (ASP) involves biological oxidation of dissolved organic pollutants with oxygen using the metabolism of microorganisms. In the presence of dissolved oxygen (injected as air or pure oxygen), the organic components change into carbon dioxide, water or other metabolites and biomass (i.e. the activated sludge). The wastewater contains the microorganisms in suspension and the whole mixture is then aerated by mechanical means. The activated sludge mixture is separated and then recycled to the aeration tank.
- 3.2.49 Complex wastewater can be treated by this technique. The process involves microorganisms digesting organic matter in the wastewater. Then the clumping together by flocculation causes fine particulate matter to become trapped in addition to breaking down any organic pollutants which are present.
- 3.2.50 Although flocculation process will capture metals within the wastewater, this technique primarily treats biodegradable organic compounds. Treatment relies on digestion by micro-organisms in the activated sludge and therefore a constant or regular flow of wastewater with an organic load is required to keep the microorganisms active. On this basis activated sludge is deemed unsuitable for treatment of a discontinuous and unpredictable rainfall dependant discharge such as that from the Rabone Lane site and therefore has not been considered further.

## 3.3 Options Considered within this Assessment

- 3.3.1 Section 3.2 discusses available treatment options which are identified as potential BAT within the BAT Conclusions Decision and discounts those techniques which are not considered suitable for treatment of rainwater run-off from the Rabone Lane site. As already highlighted in the previous section treatment solutions may utilise the techniques alone or a combination of the techniques

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identified as BAT. To inform the options considered in this assessment discussions have been held with wastewater treatment specialists and suppliers of equipment. It should be noted that detailed feasibility studies or site specific designs for each option have not been completed at this stage and therefore the assessment remains theoretical and subject to further consideration. It does however provide an indication of the likely suitable options and subject to further design informs the BAT case for management of rainwater run-off at the site.

3.3.2 The base case (Option 1) considered in this appraisal reflects the current arrangements.

3.3.3 In summary, the options considered within this assessment are as follows:

- Option 1: Discharge via oil interceptor and treatment at Minworth STW (Base case).
- Option 2: In-line filtration.
- Option 3: Stormwater (modular) treatment systems for SUDs.
- Option 4: Stormwater (modular) treatment systems for SUDs with filtration.
- Option 5: Pump and treatment using accelerated settlement.
- Option 6: Pump and treatment using accelerated settlement and flotation (DAF).

3.3.4 All options will discharge via the existing drainage system and will be sent for further treatment at the Minworth STW.

### **Option 1 – Current Wastewater Treatment Arrangement**

3.3.5 The current management of surface water run-off has already been described in Section 2. Treatment onsite comprises oil separation within an interceptor and with further treatment provided at the Minworth STW. This option would continue to use these existing arrangements with no additional treatment aimed specifically at reducing metals concentrations in the discharge.

### **Option 2 – In-line Filtration**

3.3.6 Following issue of the permit with the revised BAT AELs, Sims have trialled a simple filtration system to assess its effectiveness at reducing metals in the discharge to sewer. The system trialled at the site comprised a Kingspan NSFA filter installed within the existing drainage. The filter has two foams with slightly different gauges, with the one having the finer gauge before passing through to the interceptor.

3.3.7 This system was easily retrofitted to the existing drainage arrangements with minimal modification.

3.3.8 This system will require period exchange of the filter medium, with associated costs for replacement filter medium and disposal of used medium.

3.3.9 The trial filters were installed in May 2024 and subsequent monitoring with the filters in place has informed this assessment.

### **Option 3 – Stormwater (Modular) Treatment System for SUDs including Gravity Settlement (SPEL ESR PURCEPTOR)**

3.3.10 These systems are commonly applied to storm water management applications. Given the discharge from the Sims Rabone Lane site is not steady state and is rainfall dependant these systems were considered as a potential option for this type of flow regime. During our investigations into this option we were directed to SPEL Products<sup>6</sup> as it was understood that they

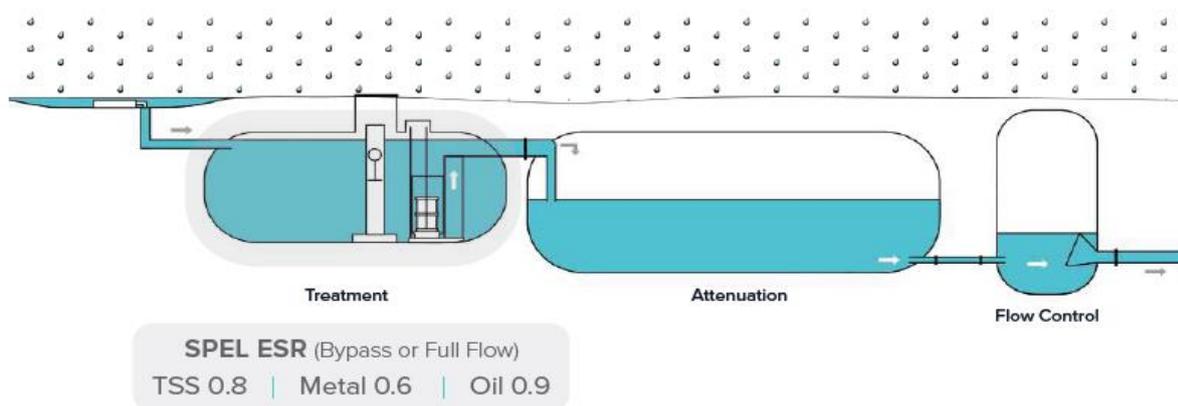
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<sup>6</sup> SPEL Products <https://spelproducts.co.uk/solutions-suds/>

are currently advising other metal recycling operators with similar issues and were aware of the issues facing the sector in managing rainwater discharges. Discussions with SPEL Products on their SuDS treatment options have informed this option as well as option 4. The units are designed as is total treatment systems which remove hydrocarbons, Total Suspended Solids (TSS) and metals.

- 3.3.11 The SPEL ESR Puraceptor meets the CIRIA SuDS Mitigation Index and has been tested against British and European Standard BS EN 858. The ESR Puraceptor has been designed to act as an all-in-one, water quality device which allows for settlement of the water and uses a coalescer insert to aid removal of hydrocarbons. The coalescer unit can be easily removed for maintenance or replacement, and inserted back into the SPEL unit and require infrequent replacement.
- 3.3.12 SPEL provide units in a range of diameters from 1.2 m to 4 m which provide treatment for catchment areas between 556m<sup>2</sup> to 49,846m<sup>2</sup> respectively. For the expected flows from the Rabone Lane Site, a unit of circa 3.5m diameter and circa 20m in length would be likely. This system can reduce TSS by a factor of 0.8, metals by a factor of 0.6 and hydrocarbons by a factor of 0.9.

**Medium Mitigation Index = TSS 0.7 | Metal 0.6 | Oil 0.7**

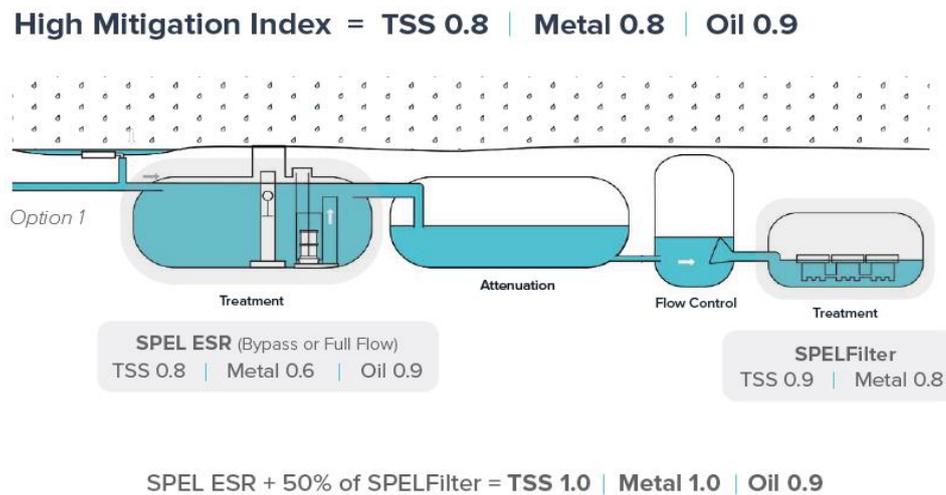


**Figure 3-1 - SPEL ESR Puraceptor Stormwater Treatment System<sup>6</sup>**

### **Option 4 Stormwater (Modular) Treatment System for SUDs including Gravity Settlement and Filtration (SPEL Puraceptor with SPEL filter)**

- 3.3.13 A more complex SPEL system, that comprises an ESR Puraceptor with an attenuation unit, flow control unit and a final filter cartridge unit, could in principle be installed on the Rabone Lane site. The Puraceptor unit has been described in Option 3 but for this option a final filtration stage comprising a SPEL filter is included.
- 3.3.14 The SPEL filter is a cartridge filter system which is designed to remove sediment based and dissolved pollutants such as heavy metals, nitrogen and phosphorous. It captures metals in both particulate and dissolved formats.
- 3.3.15 This system can reduce TSS by a factor of 0.91 and metals by a factor of 0.84 (metals dissolved 63%, metals particulate 68%).

- 3.3.16 Hydraulic pressure forces water through the filter media, which is comprised of silica-sand, discharging through the centre pipe and out through the outlet. Once the treatment cycle has been completed, each cartridge backwashes to remove particulates from the filter. This recharges and maintains each filter ready for the next treatment cycle. Solids collect on the floor of the chamber and can be removed during the following maintenance cycle.
- 3.3.17 Cartridges can be replaced individually or in tandem depending on the requirements. SPEL provide a selection of filter treatment units which are designed to provide treated flow rates from 8.4 l/s (1.8 m internal diameter unit) to 48.1 l/s (4 m internal diameter unit).



**Figure 3-2 – Indicative SPEL Purceptor with SPEL Filter<sup>6</sup>**

- 3.3.18 All SPEL systems would be installed below ground and would connect into the existing gravity fed drainage system. It should be noted that the systems are large and significant excavation would be required especially if attenuation is required, alongside the operational implications during this periods (and noting that the Rabone Lane site is a key assist to Sims operations).
- 3.3.19 Sedimentation or settlement tanks are usually flat tanks, either rectangular or circular, both equipped with an appropriate scraper and of such a size as to provide a necessary residence time of about 1.5 hours to 2.5 hours. Other tank designs are available such as hopper-bottom tanks, with vertical flow or where additional sedimentation surface is needed without increasing the size of the tanks, lamina or tube settlers can be installed.
- 3.3.20 All these tanks work by means of separation of suspended particles and floating material by gravitational settling. The settled solids are removed as sludge from the bottom, whereas floated material is skimmed from the water surface. Skimmed and settled sludge will require removal into suitable storage tanks, likely by use of pumps.
- 3.3.21 Treated effluent can then be pumped out of the tank into the foul sewer.

### Option 5 – Pump and Treatment via Accelerated Settlement

- 3.3.22 This option uses sedimentation or settlement tanks with chemical reagent dosing to accelerate the settlement process (coagulation and/or flocculation). This system has benefits where the particles cannot be readily separated by simple gravitational means, e.g. when they are too small and their density is too close to that of water or they form colloids.
- 3.3.23 The equipment for coagulation and/or flocculation is installed as part of the settlement tank which includes:
- the simultaneous dosing of coagulants via multiple injection points;

- a preference for plug flow systems, where applicable;
- a flash mixer or mixing where the coagulant is added at or before the flash mixer, static mixers or orifices.

3.3.24 With flocculation, a mixing chamber is added. Low-speed mixers are used, causing hydraulic mixing within the fluid as it flows through the tank. Partial recycling of the floc back into the flocculator can result in a better floc structure and optimum use of the flocculant.

3.3.25 Sedimentation/settlement will be used to remove the solids and will require the installation of an above ground tank.

3.3.26 Treated effluent can then be pumped out of the tank into the foul sewer.

### **Option 6 – Pump and Treatment via Accelerated Settlement and Flotation (DAF)**

3.3.27 This option is built on Option 5 with the added technique of flotation using dissolved air flotation (DAF) instead of sedimentation/settlement to remove solids/sludge. In this process solid or liquid particles or particulates are separated from the wastewater phase by attaching to fine gas bubbles, usually air.

3.3.28 After the flocculation and coagulation stage described in Option 5 above, pressurised gas (e.g. air at 0.4. 0.8 MPa, or 1.0. 1.2 MPa for aluminium compounds) is dissolved into the waste water, or part of the total waste water, and subsequently released to form small bubbles. The buoyant particles accumulate at the water surface and are collected with skimmers and transferred into a suitable storage tank, most likely by use of a pump system.

3.3.29 Treated effluent can then be pumped out of the tank into the foul sewer.

## **3.4 Scope of the Assessment**

3.4.1 In determining BAT where there are various options available consideration of the environmental performance as a whole is relevant. It is recognised that all environmental performance criteria may not be relevant to the assessment, therefore this section identifies those which are relevant to this options appraisal and justifies those which are discounted.

3.4.2 The options considered for management of aqueous run off do not give rise to significant point source emission to air or land within the installation and therefore consideration of these criteria have been excluded. All options involve systems which manage the rainwater run-off via enclosed systems and therefore for the purpose of this assessment the potential for fugitive releases and odour has been considered as similar and on this basis are also excluded.

3.4.3 Those environmental criteria considered in this assessment include:

- Emissions to water
- Energy Consumption
- Raw Materials Consumption
- Waste Disposal

## **3.5 Data Sources**

3.5.1 To inform this BAT Assessment data has been obtained from the sources identified in Table 3-1.

3.5.2 The assessment has included a cost benefit assessment and therefore information on the expected capital and operating costs have also been collated to inform the assessment. Data a sources on costs have also be set out in Table 3-1.

**Table 3-1 – Information Sources to Inform the BAT Assessment**

Option	Emissions to Water	Energy	Raw Materials	Waste	Cost Benefit
Option 1: Base Case	Sims Metal . on site monitoring of discharge	Assumed zero as gravity system	None used	None generated*	
Option 2: In-line filtration	Sims Metal . on site monitoring of discharge	Assumed zero as gravity system	Sims	Sims	Sims
Option 3: Stormwater (modular) treatment systems for SUDs	SPEL Solutions <a href="https://spelproducts.co.uk/solutions-suds/">https://spelproducts.co.uk/solutions-suds/</a>	Assumed zero as gravity system	None	Spent Coalescer	Discussions with SPEL
Option 3: Stormwater (modular) treatment systems for SUDs with filtration	SPEL Solutions <a href="https://spelproducts.co.uk/solutions-suds/">https://spelproducts.co.uk/solutions-suds/</a>	Assumed zero as gravity system	SPEL Solutions <a href="https://spelproducts.co.uk/solutions-suds/">https://spelproducts.co.uk/solutions-suds/</a>	SPEL Solutions <a href="https://spelproducts.co.uk/solutions-suds/">https://spelproducts.co.uk/solutions-suds/</a>	Discussions with SPEL
Option 5: Pump and treatment using accelerated settlement	El Samrani, A.G.; Lartiges, B.S.; Villiéras, F. Chemical coagulation of combined sewer overflow: Heavy metal removal and treatment optimization.	CWW & CWG BRef Table 3.10. <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	Hydro International: An Introduction to Dissolved Air Flotation <a href="https://content.hydro-int.com/article/introduction-dissolved-air-flotation">https://content.hydro-int.com/article/introduction-dissolved-air-flotation</a>	CWW & CWG BRef Table 3.15 <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>	CWW & CWG BRef <a href="https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf">https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/CWW_Bref_2016_published.pdf</a>

\*All options will pass via the interceptor and therefore consideration of waste oil from the interceptor has been excluded from this assessment.



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## 4 ASSESSMENT

- 4.1.1 The various options for wastewater treatment have relative benefits and disadvantages. All options discussed in Section 3.3 can treat suspended solids and total metals. This section each option against the relevant environmental criteria to compare the overall environmental performance.
- 4.1.2 Consideration of the annualised costs for each option is also provided and informs the overall BAT decision.

### 4.2 Environmental Performance

- 4.2.1 Section 3.4 identified the relevant environmental criteria to consider in this assessment as follows:
- Emissions to water
  - Energy consumption
  - Raw materials consumption
  - Waste disposal
- 4.2.2 These criteria are now discussed in turn.

#### Emissions to Water

- 4.2.3 Table 4-1 below summarises the expected metal emission concentration in the treated wastewater following each of the options considered. The expected emissions concentration is based on monitoring data for rainwater run-off from the Sims Rabone Lane for options 1 and 2. For options 3, 4, 5 and 6 the monitoring data for the Sims Rabone Lane (excluding data from the filter trails) has been reduced by the expected emissions reduction factors for each option. It should be noted that these emissions reduction factors are factors from manufacturers specs or reported in literature rather than actual reduction factors for the Sims rainwater run off.
- 4.2.4 As set out in Section 2, lead and zinc are the two metals with routinely the highest concentrations in the wastewater discharge to sewer. These two parameters require very high treatment reduction factors to meet compliance in all samples (c. 96% to 99%), although significantly lower concentrations are required to achieve compliance with respect to mean concentration. This observation is relevant given the spot sampling currently undertaken is not appropriate for making comparisons with the BAT AELs which indicates compliance monitoring of spot samples is suitable for a consistent, homogenous discharge, otherwise periodic sampling should be an average value of a flow proportional sample over the release period. On this basis consideration of the mean concentrations has been used for this assessment. Lower treatment reduction factors are required to meet BAT-AELS in all samples for other metals (ranging from 5% for chromium to 69% for copper) and hydrocarbons (53%).
- 4.2.5 All treatment options show an improvement on the current option at the point of discharge from the site. With the exception of options 1, 2 and 3, based on the data and assumptions used in this assessment all options could theoretically meet the BAT AELs for metals. As described in Section 2 and summarised in Table 2-3 the metals lead and zinc are the two principal contaminants of concern in emissions to sewer when measured as totals.
- 4.2.6 Given previous H1 assessments for the Sims Rabone Lane have concluded that emissions from the site via the Minworth STW are not significant, and emissions from all other options are lower than those from with the installed system, it is concluded that the impact from all options would be insignificant.

**Table 4-1 – Comparison of Emissions Performance to Water**

Parameter	BAT AEL/Permit ELV	Option 1: Base Case	Option 2: In-line filtration	Option 3: Stormwater (modular) treatment systems for SUDs	Option 4: Stormwater (modular) treatment systems for SUDs plus filtration	Option 5: Pump and treatment using accelerated settlement	Option 6: Pump and treatment using accelerated settlement and flotation (DAF)
Arsenic	0.5 mg/l	0.004 mg/l	0.004 mg/l	0.00153 mg/l	0.00063 mg/l	0.00041 mg/l	0.00022 mg/l
Cadmium	0.5 mg/l	0.028 mg/l	0.003 mg/l	0.0113 mg/l	0.0045 mg/l	0.0028 mg/l	0.0014 mg/l
Chromium	0.15 mg/l	0.039 mg/l	0.012 mg/l	0.016 mg/l	0.006 mg/l	0.004 mg/l	0.002 mg/l
Copper	0.5 mg/l	0.428 mg/l	0.088 mg/l	0.171 mg/l	0.069 mg/l	0.043 mg/l	0.021 mg/l
Lead	0.1 mg/l	0.976 mg/l	0.162 mg/l	0.390 mg/l	0.062 mg/l	0.098 mg/l	0.049 mg/l
Nickel	0.5 mg/l	0.109 mg/l	0.024 mg/l	0.043 mg/l	0.017 mg/l	0.011 mg/l	0.005 mg/l
Mercury	5 µg/l	1 µg/l	<0.0005 µg/l	0.16 µg/l	0.10 µg/l	0.08 µg/l	0.07 µg/l
Zinc	1 mg/l	5.819 mg/l	2.16 mg/l	2.327 mg/l	0.372 mg/l	0.582 mg/l	0.291 mg/l

Concentrations in red exceed the BAT AEL.

## Energy Consumption

- 4.2.7 Option 1, 2,3 and 4 are all gravity based systems that do not introduce the need to dose treatment chemicals or similar, therefore there is no energy input for these systems. Energy consumption, unless sourced from a renewable system will have both resource consumption and global warming impacts.
- 4.2.8 Options 5 and 6 are both above ground treatment options and require energy to pump the rainwater run-off from the below ground drainage system to the treatment and also for supplying reagents for the accelerated settlement and for Option 6 to supply air to the DAF system. Energy input is also assumed to be needed for sediment removal systems.

**Table 4-2 – Annual Energy Consumption**

Option	Annual Energy Consumption
Option 1: Base Case	0
Option 2: In-line filtration	0
Option 3: Stormwater (modular) treatment systems for SUDs	0
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	0
Option 5: Pump and treatment using accelerated settlement	1,670 kW
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	3,276 kW

- 4.2.9 Based on the data in Table 4-2, Options 1, 2, 3 and 4 have the best energy performance.

## Raw Materials Consumption

- 4.2.10 Option 1 requires no raw material additions as further treatment of solids and metals is carried out at the Minworth STW. Raw material inputs for Option 2 is limited to replacement filters. Consumption of filters for this option is based on a weekly exchange and with each filter being cut into 3 squares meaning a total of 18 filters need to be purchased per annum.
- 4.2.11 Option 3 has no raw material usage. Option 4 will use sand within the filter system which will be regenerated but does require periodic replacement every 5 years (or less frequent). The number of sand filter units placed inside each SPEL unit will be calculated based on the volume of wastewater to be treated and for the expected volumes from the Rabone Lane site it is expected that 6 filters could be needed.
- 4.2.12 Raw materials in the form of coagulants and flocculants will be used for Options 5 and 6 to assist with the treatment. Consumption of these materials will be dependent on the intensity and duration of the rainfall event.
- 4.2.1 The use of coagulants and flocculants is based on the volume of wastewater to be treated. Higher than average rainfall will result in increased use of the agents. However, at the dosage rates of 0.5-100 g/m<sup>3</sup> and 0.6-1.2 g/m<sup>3</sup> for Options 5 and 6 respectively, the increase in use of raw materials will not be significant. Average annual rainfall has been calculated at 731mm<sup>7</sup> and the site area as 20,700m<sup>2</sup> to estimate the mass of coagulant/flocculant required.

<sup>7</sup> <https://nrfa.ceh.ac.uk/data/station/spatial/28003>

**Table 4-3 – Annual Raw Material Consumption**

Option	Raw Material(s)	Annual Consumption
Option 1: Base Case	None	None
Option 2: In-line filtration	Filters	circa 18 filters
Option 3: Stormwater (modular) treatment systems for SUDs	None	None
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	Spent sand filters (each unit holding 6 filters)	1.2 units, based on filter life of 5 years for each filter
Option 5: Pump and treatment using accelerated settlement	Coagulants/Flocculants	Approx. 1,513 kg based on average annual rainfall and dosage of 0.5-100 g/m <sup>3</sup> of coagulant/flocculant
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	Flocculant dose	Approx. 18.16 kg based on average annual rainfall and dosage of 0.6-1.2 mg/l

## Waste Disposal

- 4.2.2 Option 1 will not generate wastes for disposal (oily wastes from the interceptor are considered similar for all options and therefore have not been considered within this assessment). The addition of a simple filter in Option 2 adds a waste product in the form of exhausted filters which may need to be sent to landfill.
- 4.2.3 Option 3 will require maintenance in the form of coalescer and clarifier units and Option 4 for sand filters. Whilst these are not likely to require regular replacement (depending on treatment train), the supplier may offer an option to take away the exhausted items and recycle some elements of the units. The coalescer and clarifier are designed to be manually cleaned and reinserted into the system, but these may reach a point where replacement is necessary.
- 4.2.4 For Options 3-6, the formation of sludge, settled or scraped solid matter will require testing and suitable disposal. Data on sludge is conservative as it is based on the solid content and excludes residual water that will remain in the residue. Reducing residual water with a further stage for dewatering will reduce the overall sludge volume, storage and disposal costs. If testing reveals hazardous properties, the sludge waste may need to be sent to landfill for disposal.

**Table 4-4 – Annual Waste Generation**

Option	Wastes Produced(s)	Annual Generation
Option 1: Base Case	None	None
Option 2: In-line filtration	Used filters	2 bins holding up to 16 filters
Option 3: Stormwater (modular) treatment systems for SUDs	Settled sludge Coalescer	Coalescer may require annual replacement Sludge/solids generation ~ 3.3 tonnes
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	Settled sludge Spent sand filters	6no. filters, replaced every 5 years (~1.2 filters/year) Sludge/solids generation ~ 4.1 tonnes

Option	Wastes Produced(s)	Annual Generation
Option 5: Pump and treatment using accelerated settlement	Settled sludge	~ 4 tonnes
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	Settled sludge	~ 3.5 tonnes

4.2.5 Overall option 1 performs best in terms of waste generation. Option 2 produces limited waste. Options 3, 4, 5 and 6 all produce settled sludges that require disposal. Options 4 and 5 produce the most sludge in similar amounts, Option 3 the least whilst Option 6 produces slightly more sludge than Option 3 but is very similar.

## Environmental Performance Summary

4.2.6 Table 4-5 below displays the environmental performance of each option.

**Table 4-5 – Environmental Performance Ranking**

Option	Emissions to Water	Energy	Raw Materials	Waste	Score
Option 1: Base Case	6	1	1	1	9
Option 2: In-line filtration	5	1	2	2	10
Option 3: Stormwater (modular) treatment systems for SUDs	4	1	3	3	11
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	3	1	4	6	14
Option 5: Pump and treatment using accelerated settlement	2	5	5	5	17
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	1	6	5	4	16

- 4.2.7 Option 1 ranks the highest in terms of environmental performance. However, Option 1 is the current drainage arrangement and does not consistently meet the BAT-AELs for all metals, resulting in the highest emission to water score. It uses no energy, least amount of raw materials and produces the least amount of waste, hence its high environmental performance.
- 4.2.8 Option 2 ranks second place, as it also uses no energy, very little raw materials and produces little waste (in the form of used filters). However, whilst this option has improved metals performance it still cannot guarantee compliance with BAT-AELs for all metals, resulting in a high emission to water score.
- 4.2.9 Options 3 ranks third place for environmental performance. Option 3 will produce wastes in the form of coalescence units and sludge which require disposal. It scores lower for emissions to water and may not meet BAT-AELs for all metals. This option uses hydraulic pressure and does not require energy.
- 4.2.10 Option 4, ranks fourth for environmental performance. Option 4 is similar to Option 3 in its use of hydraulic pressure, and so it requires no energy, but may produce more waste in the form of same used filter units. However, these do have a life of approximately 5 years before needing replacement. Option 4 scores higher than Options 1, 2 and 3 for emissions to water and has the potential to meet BAT-AELs for all metals released in run-off from the site.
- 4.2.11 Options 5 and 6 both score equally for raw materials usage. Although Option 5 scores slightly higher for waste production. Both options will use reagents which will produce a sludge waste. Both options will require pumps to bring wastewater above ground. Energy is also used by both

option in the treatment process and then to pump the treated water to the outfall. However, Option 6 will consume more energy in the treatment process and so it scores higher for energy usage. Option 6 ranks the best for emissions to water followed by Option 5 in second place. Both options are likely to meet the BAT-AELs for all metals released from the site.

## 4.3 Cost Benefit Appraisal

4.3.1 To determine BAT a cost benefit analysis has been carried out. To inform this part of the assessment capital and operating costs have been collated for the various options. It should be noted that all options will discharge effluent to sewer that will attract charges from Severn Trent. Given the volume of the discharge is expected to be broadly similar for all options this operational costs is similar for all options and therefore has been exclude from the analysis. These costs have been used to calculate equivalent annual costs in accordance with H1 software tool<sup>8</sup>. A discount rate of 3.5% has been used, this is consistent with approaches for policy assessment in the UK e.g., HM Treasury Green Book and an assumed life of the facility is 25 years. Table 4-6 below shows the annualised costs for each option.

**Table 4-6 – Annualised Costs**

Option	Capital Costs*	Operating Costs	Annualised Costs
Option 1: Base Case	£0	£30,000 Maintenance two times per year. Cost includes disposal	£0
Option 2: In-line filtration	£0	Filter £135 per square £2430 pa Disposal costs £530 pa	£2,960
Option 3: Stormwater (modular) treatment systems for SUDs	£55,000 Stormwater ESR unit only  Excavation ~£100,000  disposal of arisings if landfilled (incl. landfill tax):  Non-hazardous disposal ~£68,000  (Hazardous disposal ~£105,000)	Coalescer £200  Sludge removal costs for 3.3 tonnes/year £436  (£673 hazardous waste landfill)	£13,442
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	£55,000 Stormwater ESR unit + £30,000 Filtration unit  Excavation costs ~£150,000	£3,000 per filter unit, to be replaced every 5 years (£3,600/year)  Sludge removal costs for 4.2 tonnes/year £555	£25,346

<sup>8</sup> Note v2.78 of the H1 software tool has been utilised. Whilst there is a more recent H1 tool the options appraisal function is not working.

Option	Capital Costs*	Operating Costs	Annualised Costs
	disposal of arisings if landfilled (incl. landfill tax):  Non-hazardous disposal ~£134,000  Hazardous disposal ~£207,000	(£857 hazardous waste landfill)	
Option 5: Pump and treatment using accelerated settlement	£492,000*	£15,132 reagents  £424 energy costs  Sludge removal costs for 4 tonnes £528  (£816 hazardous waste landfill)	£72,040
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	£972,000*	£155,574.45*  £15,132 reagents  £832 energy costs  Sludge removal costs for 3.5 tonnes £462  (£714 hazardous waste landfill)	£228,168

\*per 1,000m<sup>3</sup> tank volume

- 4.3.2 Option 1 is the base case and is the least costly option with no capital costs as the system is currently in use. The operating costs relate to the annual maintenance and removal of built up sludge and oily water. The remaining options will also require the removal of sludge and oily water. As this option produces the least amount of waste and least usage of energy, it scores the best out of all the options for environmental performance. However, importantly this option does not meet the required BAT-AELs for all metals, as shown in Table 4-1 and scores the lowest for emissions to water.
- 4.3.3 Option 2 has ranked second place for costs as it requires no capital costs as the system is already in place at the site. The operating costs are very minimal relating to the replacement of foam filters and disposal of used filters. However, as with Option 1, this technique scores higher for emissions to water, however whilst it achieves lower metals in emissions based on the limited data available it is unlikely to meet the BAT-AELs for all metals, as shown in Table 4-1.
- 4.3.4 Option 3 and Option 4 are both sub-surface structures which will attract very high capital costs with Option 4 requiring the additional filtration unit. The installation of SPEL units will require excavation work and removal of arisings, which have the potential to be contaminated due to the site being use for industrial activities. Contaminated excavation waste may require disposal as hazardous waste. Option 4 will require a larger excavation footprint than Option 3 due to the additional filter units, therefore higher excavation and disposal of excavation costs. Operating costs for both options relate to the removal of sludge. Option 3 may require the replacement of the coalescer unit on an annual basis. Option 4 has higher operating costs due to the sand filters which have a life of 5 years, resulting in higher annualised operating costs than Option 3.

However, Option 4 ranks higher than Options 1, 2 and 3 for emissions to water as this option is likely to meet BAT-AELs, as shown in Table 4-1.

- 4.3.5 Options 5 has higher capital and operating costs than Option 1 to 4. This option is above ground and therefore does not require excavation works. However, the cost of the plant is higher than all but Option 6. The environmental performance ranking for Option 5 shows that this option is likely to meet the BAT-AELs, also shown in Table 4-1, and so it scores well for emissions to water but does score high for the use of raw materials, energy and waste production. This option requires energy for pumps and the treatment process which increases the operational costs, which also includes the associated reagents and sludge disposal costs. Overall, the annualised costs for this option are much higher than the previous options discussed above.
- 4.3.6 Option 6 has the highest capital and operating costs, therefore comes out as having the highest annualised costs out of all the options. Similar to Option 5, this option uses above ground plant which require pumps, reagents and associated disposal costs. Therefore, the overall environmental performance is almost the same for both options. However, Option 6 ranks the highest for emissions to water and is very likely to meet the BAT-AELs, based on the data provided in Table 4-1.
- 4.3.7 Whilst the cost benefit appraisal has considered environmental performance, capital costs and operating costs of each the options has also be considered. To calculate the mass of each metal released the annual average flow rate of 15,132m<sup>3</sup> has been assumed and multiplied by the concentration for each metal as shown in Table 4-1 above. The mass of metals removed has been calculated as the total mass of all metals considered in this assessment for the base case (option 1) which releases 112 kg per annum minus the total mass of metals released for each option. Table 4-7 below shows the annualised cost per kilogram and per tonne for the removal of the pollutants for each option.

**Table 4-7 – Cost of pollutant removal**

Option	Pollutant Removed (kg/year)	Annualised cost/kg	Pollutant Removed (tonnes/year)	Annualised cost/tonne
Option 1: Base Case	0	0	0	--
Option 2: In-line filtration	75	£40	0.075	£39,467
Option 3: Stormwater (modular) treatment systems for SUDs	67	£201	0.067	£200,627
Option 4: Stormwater (modular) treatment systems for SUDs with filtration	104	£244	0.104	£243,712
Option 5: Pump and treatment using accelerated settlement	101	£713	0.101	£713,267
Option 6: Pump and treatment using accelerated settlement and flotation (DAF)	106	£2,153	0.106	£2,152,528

- 4.3.8 The annualised costs per kilogram/tonne increase sequentially for each option with Option 2 being the least expensive and Option 6 being the most expensive. However, as mentioned already, Option 2 and 3 are unlikely to produce results which meet the BAT-AELs, whilst Options 4, 5 and 6 are likely to produce results which meet the BAT-AELs.
- 4.3.9 The cost benefit appraisal shows that the options which are most likely to meet the BAT-AELs also rank lower for overall environmental performance and attract the highest capital and operative costs (Options 6, 5 and 4). These options also remove very similar quantities of pollutants, but



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Option 4 is the least expensive in terms of pollutant removal. The overall least expensive options (Options 1 and 2) rank the highest for overall environmental performance but are unlikely to meet the BAT-AELs for all metals and rank the lowest for emissions to water.

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## 5 DISCUSSION AND CONCLUSIONS

### Overview

#### Rabone Lane Facility

- 5.1.1 Sims operate the Rabone Lane site as a metal recycling facility which treats hazardous and non-hazardous wastes within a shredder machine. The wastes accepted and treated at the site range from metals, end of life vehicles and WEEE. The site is mostly open with concrete impermeable surfacing covering external areas. Metal waste is deposited, handled and stored outside, which is typical for a metal recycling activity.
- 5.1.2 Surface waters drain via the site drainage system linked to an interceptor which discharges to the foul water sewer in Foundry Lane (indirect discharge). The site is permitted to discharge process water and runoff from the treatment and storage to foul sewer authorised by a trade effluent consent from Severn Trent Water (Consent No. 008675V).
- 5.1.3 This report forms the assessment of the permitted activities against the Waste Treatment Industries Best Available Techniques (BAT) Conclusions<sup>1</sup>, as previously discussed in Section 1.2. The BAT Options Appraisal is a comparison between a different options to determine ranking to inform decision making. The process can involve qualitative as well as quantitative assessments. The cost benefit analysis considers the economic proportionality of each option against the benefits.
- 5.1.4 Sims have already implemented measures and are working towards completion further measures, that assist with minimising metal contamination of rainwater run-off from the treatment plant and material storage areas. These measures include covering conveyors which transport lighter fractions; review and installation of additional enclosures on the trommel, eddy-current separator (ECS) and drum magnet; and the provision of covered bays for non-metallic fractions. Housing all treatment and storage activities within a building (hence with a roof structure) whilst avoiding contamination of the rainwater was not considered feasible or practical and would incur significant costs and therefore was discounted. Even with a roof structure, especially where high to accommodate plant a run-off could still occur as a result of rainwater runoff around the site or ingress from any open sides.

#### Results of Cost Benefit Analysis

- 5.1.5 Capital and operating costs for each option have been used to produce the cost benefit analysis, which can be found in Section 4.3. Annualised costs have also been produced using the H1 software tool.
- 5.1.6 The options most likely to treat runoff to a quality that would be guaranteed to meet the BAT-AELs for all metals are shown to be the most expensive in terms of capital and operating costs. The options which are the least expensive are unlikely to treat runoff to meet BAT-AEL requirements for all metals as per the current permit, subject to the additional consideration below.
- 5.1.7 Option 1 was the least expensive and ranked highest for environmental performance but does not currently meet the BAT-AELs for all metals. This option does not attract capital costs, does not use energy and produces the lowest amount of waste. Option 6 was most likely to treat runoff to BAT-AELs but is the most expensive option and also ranked low for environmental performance. This is due to the high energy usage, high volumes of raw material needed, and volumes of waste produced.
- 5.1.8 The outcome of the cost benefit analysis demonstrates that a system which treats wastewater to BAT-AEL quality requires high capital and operational costs and has environmental performance implications relating to energy, raw material usage and waste production. Whilst a treatment

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system which treats wastewater to quality levels which falls short of BAT-AELs may have better environmental performance in terms of low or no energy usage, little raw material usage and little waste production.

- 5.1.9 Whilst Options 4, 5 and 6 are the most likely to treat wastewater to BAT-AELs, the considerations required by Sims in relation to costs, site operations during installation etc. mean a final outcome has not been reached.
- 5.1.10 Although a large amount of work has been undertaken to inform the assessment of each option, the assessments are underpinned by significant assumptions and has a complexity or uncertainty that must be appreciated before any final decision can be made about the most appropriate way forward. This additional information requiring consideration is discussed below.

## General Considerations

### Site and Monitoring Considerations

- 5.1.11 Sims took over the site from the previous operator in July 2011, thereby inheriting the site infrastructure and drainage system. That drainage system has been surveyed and is shown in the plan provided in Appendix C. Details of the site activities and the current drainage arrangements have been covered in Section 2. The existing drainage system conveys rainfall dependant surface water run-off from the site surfacing, via an interceptor, to foul sewer on Foundry Lane.

1. The emission to sewer is stormwater runoff resulting from rainfall over operational area of the facility:
  - a. At Rabone Lane, run-off produced by rainwater is captured by the oil separator and very recently via a simple filter before it discharges into the foul sewer which leads to the Minworth STW. Due to the open areas of the site with external waste storage and treatment areas, rainwater will likely percolate through stockpiles of waste. As this run-off cannot be reused within any of the waste handling operations, it is discharged into the foul sewer as an indirect discharge. The Waste Treatment BRef<sup>9</sup> recognises this is a way of managing rainwater run-off at waste treatment facilities using metal shredders, (see Section 3.1.2.2.1 of BRef<sup>9</sup>). The BRef<sup>9</sup> also reports for WEEE treatment plants, rainwater run-off is captured, filtered and sent to STW for further treatment as indirect discharges, (see Section 3.2.2.2 of BRef<sup>9</sup>). Furthermore, outdoor waste storage areas which are served by impermeable surfacing and sealed drainage is recognised within Section 4.1.13 of the Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities<sup>10</sup>.
  - b. Given the observations highlighted in bullet point 1.a, it is assume that the EA does not have any fundamental issue with the type of gravity-stormflow discharge arrangements currently operating on the Rabone Lane facility.
  - c. In this setting, it is generally accepted that runoff will be characterised variable sediment / metal / contaminant concentrations over the duration single rainfall event (i.e. a first flush with subsequent decline in suspended load with time as flow decreases). It is assumed that the EA are in agreement with this basic conceptual model although it has not currently been proven from site-specific monitoring data.

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<sup>9</sup>Best Available Techniques (BAT) Reference Document for Waste Treatment Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control) [https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC113018\\_WT\\_Bref.pdf](https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC113018_WT_Bref.pdf)

<sup>10</sup> Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities <https://www.gov.uk/guidance/waste-electrical-and-electronic-equipment-weee-appropriate-measures-for-permitted-facilities/4-waste-storage-segregation-and-handling-appropriate-measures>

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- d. Sims currently have 6no. of similar sites, and possibly a further 1no. site, in the UK which may look to include shredding in the near future. The costs presented herein do not therefore represent a single cost but could be rolled out to the entire family of similar facilities they operate.
2. On-site monitoring and the application of BAT-AELS as described in the Permit:
- a. The full data water quality monitoring dataset for the Rabone Lane facility (2022, 2023 and 2024) is presented in Appendix B and has been described in Section 2. The number of exceedances of the BAT-AELS are summarised in Table 2-3.
- b. Note 1 on Table 3 of the Permit: Given the observations in bullet point 1.c, spot sampling is not an appropriate approach for obtaining water samples to be used for compliance purposes for this batch emission from the facility. By using spots samples, the BAT-AELS are essentially being used as Maximum Allowable Concentrations for all spot samples. Note 1 indicates that flow proportional samples would be appropriate for rainfall event batches. Given the observations in bullet point 1.c, it is considered likely that spot samples will overestimate total concentrations over each batch (rainfall event) and that the mean concentrations calculated for the entire dataset (see Table 2-3) are likely to be more representative concentrations that would be obtained if flow-proportional sampling was undertaken.
- c. Despite the observation in Bullet Point 2.b, there is no continuous flow monitoring associated with the emission points to sewer. An alternative approach for sampling needs to be determine and agreed with the EA, if BAT-AELs are to be used for compliance purposes. This approach will have to recognise and the limitations of this gravity subsurface drainage system and must be appropriate for all Sims sites and the wider sector.
- d. The primary water quality issue on the facility relates to metals. However, compliance issues are most acute for lead and zinc (see Table 2-3), which exceed their respective BAT-AEL in almost all samples (28 of 29) and with a mean concentration that also exceeds the BAT-AEL. For all other metals the BAT-AELS are exceeded occasionally (i.e. between 1 to 6 of the 29 samples) and the mean concentration for each those metals does **not** exceed the AEL. This emphasises the need to determine an appropriate sampling approach for these non-homogeneous batch emission from the site (Bullet Point 2.c)
- e. Note 3 on Table 3.2 of the Permit, suggests there is the potential to agree different limits for the metals lead and zinc with the EA. This is extremely important for determining treatment approaches, given these two metals are the key compliance issue with respect to facility. It is therefore vital we understand, on what basis such an agreement would be made.
- f. It must be emphasised that the emissions from the Rabone Lane facility are not direct discharges to controlled waters. These waters go to the Minworth STW, where they constitute a small component of the inflow and where treatment for the key contaminants of concern will occur. The decision to incorporate the upper end of the BAT-AELs, not considering footnotes 4 and 5 of the BRef<sup>9</sup>, into the permit has made no allowance for this downstream treatment. This seems unreasonable, especially when it is realised the BAT-AELS quoted for metals (see Tables 6.1 and 6.2 of BRef<sup>9</sup>) for direct and indirect discharges are the **same** and the initial H1 Assessment for dissolved concentrations has predicted no significant environmental risk from metals in the discharge even prior to the simple filters being installed.
- g. Sims have carried out a further sampling exercise on the effluent discharge during a recent rainfall event in August 2024. Effluent leaving the site was captured for the first flush and the final flush and tested for parameters including total and dissolved metals.

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The results of the analysis were intended to provide a clearer idea of the particle size distribution with the aim to carry out jar tests for flocculants and coagulants. The sampling and testing of the effluent have been costly. However, on this occasion the samples did not exhibit characteristics similar to previous samples and appeared to be cleaner. Therefore, this exercise will need to be repeated.

3. Site run-off volumes and flows requiring treatment:

- a. The emission to sewer comprises the runoff generated from direct rainfall to the c. 20,000m<sup>2</sup> site area.
- b. The objective of existing site drainage is to convey water off site (to sewer) without flooding the site. Given the inherited nature of the drainage system on the site, the design criteria for its construction are not known.
- c. Preliminary runoff modelling has been commissioned as part of these works. This work has provided estimated of runoff rates and volumes, for different rainfall return periods using the Causeway software that uses site-specific survey data for the drainage system and FEH rainfall data. Modelling results for 1in2 to 1in100 year event return periods have been produced and indicate for the main catchment on the Rabone Lane facility runoff volumes could range from c. 200 m<sup>3</sup> up to c. 1,200 m<sup>3</sup>
- d. Given the assumption highlighted in bullet point 1b, there is currently no understanding whether the EA consider a switch from a gravity subsurface stormwater runoff system to a surface pump and treat system is desirable or sensible outcome for treatment on this type of facility.
- e. The EAs position with regards to the acceptability of component of (untreated) stormwater overflow during high rainfall events as part of any treatment option is not known.
- f. We have no understanding whether the EA have an expectation for all water to be captured and treated to meet EALs or whether a component (e.g. first flush or smaller, more common, events) of flow would suffice, accepting that higher flows would bypass the treatment system (as per bullet point 3e)

### Options assessment approach

5.1.12 A number of important assumptions must be highlighted in relation to the approach adopted for the options assessments presented herein:

1. The option assessment approach has been based on the derivation of Treatment or Reduction Factors for key contaminant groups (most notably metals, but also considered suspended solids and hydrocarbons measured as HOI).
2. No allowance has been made for the additional, downstream treatment that will occur at Minworth STW.
3. Reduction Factors have been obtained from treatment system manufacturers (e.g. SPEL), scientific / industry literature and/or professional opinion of the team of water treatment specialist engaged for the project (Ian Wilson, Nijhuis and RPS inhouse specialist engineers).
4. Given comments in bullet point 2.b, the Reduction Factors have been applied to concentrations measured for each individual sample in the complete water quality dataset (Appendix B). However, the contaminant concentrations reported for each option in Table 4-1 and used for testing of compliance, is the **mean concentration** for the entire dataset. We do not know if this approach is acceptable to the EA.

5. The Reduction Factors required to reduce the concentration of metals to below their respective BAT-AEL are summarised in the table below. Reduction Factors have been back calculated for all samples to meet BAT-AEL and also for the mean concentration to meet BAT-AELs. The latter Reduction Factor is only required for lead and zinc which are the only parameters that have means that exceed BAT\_AELS. The resulting reduction factors demonstrate the high RF needed for lead and zinc compared to the other metals.

Parameter	BAT - AEL (Permit)	Unit	Required Treatment Factor (All Samples < AEL)	Required Treatment Factor (Mean < AEL)
HOI /Total EPH (Treated)	10	mg/l	0.523	-
Arsenic, Total (Treated)	0.05	mg/l	-	-
Cadmium, Total (Treated)	0.05	mg/l	0.353	-
Chromium, Total (Treated)	0.15	mg/l	0.039	-
Copper, Total (Treated)	0.5	mg/l	0.690	-
Lead, Total (Treated)	0.1	mg/l	0.986	0.897
Nickel, Total (Treated)	0.5	mg/l	-	-
Mercury (Treated)	0.005	mg/l	-	-
Zinc, Total (Treated)	1	mg/l	0.955	0.8281

## Detailed Option Considerations

- 5.1.13 Six different treatment options have been considered as part of this assessment, including the no change scenario (Option 1). Options 3 to 6 represent the most comprehensive and often complex treatment approaches outlined in BRef. Although considerable work has been undertaken to evaluate these complex treatment options, they can only be considered a preliminary evaluation given amount of detailed site-specific information that is required determine the performance of each option, inform design and allow associated costs to be forecast. All of these options are characterised by significant assumptions and high levels of uncertainty at this stage.

### Option 1: Current wastewater treatment arrangements

- 5.1.14 An overview of the existing drainage system has been provided in Section 2. The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of this option has been discussed in paragraph 4.3.2
- 5.1.15 The cost benefit analysis found this option was the most cost effective and has the highest environmental performance. However, this option does not produce an effluent which is BAT-AEL compliant. Although essentially representing the status-quo, the following must be considered:
- By using an appropriate sampling approach the number of exceedances may reduce (albeit unlikely for lead and zinc) [Bullet point 2.b]
  - Agreement of new AELs for lead and zinc could reduce the number of exceedances [Bullet point 2.e]

### Option 2: In-line filtration

- 5.1.16 Option 2 is the use of in-line filtration within the existing drainage system. Sims have trialled the effectiveness of using simple in-line filters within the existing drainage systems. Kingspan NFSA filters were placed into the interceptor pre-chamber in May 2024. An overview of Option 2 has been provided in paragraphs 3.3.7 to 3.3.9.

5.1.17 The cost benefit analysis found this option was the second most cost effective and has the second highest environmental performance. However, as with option 1, this option may not produce an effluent which is BAT-AEL compliant for all metals. The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of this option has been discussed in paragraph 4.3.3. An example of the filter used is provided in the photographs below.



**Figure 5-1 – Images of Kingspan NFSA filter.**

5.1.18 By installing simple in-line filters an apparent improvement in water quality was achieved, albeit lead and zinc remained non-compliant. However, the following must also be considered:

- There is a very limited dataset showing performance of this treatment option with respect to total metals. Longer monitoring period is required to fully understand its performance under a range of different sized rainfall events.
- The scope of this treatment option has not been fully evaluated (i.e. all locations across the site?). This option must be balanced potential flooding issues by impeding drainage.
- Enhanced housekeeping including filter cleaning, surface wash down etc will be required and may result in improved performance of this Option.
- By using an appropriate sampling approach the number of exceedances may reduce relative to BAT-AELS, albeit unlikely for Lead and Zinc [Bullet point 2.b]
- Agreement of new AELs for lead and zinc could reduce the number of exceedances of BAT-AEL [Bullet point 2.e]

### **Option 3: Stormwater treatment system utilising gravity settlement (SPEL ESR Puraceptor)**

5.1.19 Option 3 is a subsurface system installed as part of site drainage. An overview of Option 3 has been provided in paragraphs 3.3.10 to 3.3.12 The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of Option 3 and 4 have been discussed in paragraph 4.3.4.

5.1.20 The stated performance of the more simple treatment for the SPEL systems are published by the manufacturer and have been certified by independent bodies. The cost benefit analysis found this option to be considerably more expensive than Option 1 and 2 and has lower overall environmental performance. However, as with Option 1 and 2, although improved water quality is expected this option is not likely to produce an effluent which is BAT-AEL compliant for lead and zinc.

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5.1.21 The following must also be considered:

- Significant excavations will be required for the installation of these subsurface treatment tanks. Soil and groundwater quality on the site is unknown and characterisation would be required. That cost has not been included in the BAT assessment for this option.
- Excavated soils will require disposal and this could be very costly if those soils are contaminated. This is possible given the historical legacy of operations in this industrial area and could necessitate costly remediation.
- This is an off-the-shelf system hence detailed design requirements will be less onerous compared to pump and treat options. The system is also designed specifically for a gravity storm runoff system with respect to the treatment of the key contaminants of concern (suspended solids, metals and hydrocarbons).
- Detailed design will be required in relation to for sizing of the ESR Puraceptor. The required hydrological assessments would be more detailed than undertaken as part of these works. This could potentially lead to issues being identified with regards to the specific design criteria for the existing drainage system and additional cost.
- A temporary cessation to operations would likely occur during the installation of the ESR system. This would incur significant cost and have logistical implications for Sims that have not been evaluated as part of these works.
- A storm overflow system could be used to minimise the size of the ESR Puraceptor required. The acceptability of such an overflow to the EA is not known [Bullet Point 3.e]
- By using an appropriate sampling approach the number of exceedances may reduce relative to BAT-AELS, albeit unlikely for Lead and Zinc [Bullet point 2.b]
- Agreement of new AELs for lead and zinc could reduce the number of exceedances of BAT-AEL potentially bring this system into compliance [Bullet point 2.e]
- Permanent surface land take is small relative to the surface pump and treat options (Option 5 and 6)

#### **Option 4: Stormwater treatment system utilising gravity settlement and filtration (SPEL ESR Puraceptor with SPEL Filter)**

5.1.22 Option 4 is a subsurface system installed as part of site drainage and builds upon the system described in Option 3. An overview of Option 4 has been provided in paragraphs 3.3.13 to 3.3.21. The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of Option 3 and 4 have been discussed together in paragraph 4.3.4.

The stated performance for this combined system is enhanced relative to the ESR Puraceptor system considered for Option 3.

5.1.23 The cost benefit analysis found this option to be more expensive than Option 3 and has slightly lower overall environmental performance. This option is likely to produce an effluent which is BAT-AEL compliant which Options 1, 2 and 3 are unlikely to achieve. The following must however be considered:

- Significant subsurface flood attenuation likely to be required to control inflow rate into the SPEL filters. The attenuation requirement has not been subject to detailed to design and will significantly increase the excavation requirement and all associate capital, investigation, excavation and disposal costs. In the absence of detailed design it is unclear if sufficient space would be available on the site to accommodate such a subsurface system.
- This is an off-the-shelf system hence detailed design requirements will be less onerous compared to pump and treat options. The system is also designed specifically for a gravity



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storm runoff system with respect to the treatment of the key contaminants of concern (suspended solids, metals and hydrocarbons).

- Detailed design will be required in relation to for sizing of the ESR Puraceptor and attenuation. The required hydrological assessments would be more detailed than undertaken as part of these works. This could potentially lead to issues being identified with regards to the specific design criteria for the existing drainage system and additional cost.
- Temporary cessation to operations would likely occur during the installation of the combined ESR and Filter system. This would incur significant cost and have logistical implications for Sims. These costs would be substantially greater than for the ERS system and have not been evaluated as part of this assessment.
- Permanent surface land take is small relative to the surface pump and treat options (Option 5 and 6)
- A storm overflow system can be used to minimise the size of the ESR Puraceptor and Filter required. The acceptability of such as system to the EA is not known [Bullet Point 3.d]
- By using an appropriate sampling approach the number of exceedances may reduce relative to BAT-AELS, albeit unlikely for Lead and Zinc [Bullet point 2.d]
- Agreement of new AELs for lead and zinc could reduce the number of exceedances of BAT-AEL potentially bring this system into compliance [Bullet point 2.e]
- No allowance has been made for the additional, downstream treatment that will occur at Minworth STW.

### **Option 5: Pump and treatment via accelerated settlement**

5.1.24 Option 5 is an above ground bespoke water treatment system. An overview of Option 5 has been provided in paragraphs 3.3.22 to 3.3.26. The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of Option 5 has been discussed in paragraph 4.3.5.

5.1.25 The cost benefit analysis found this option to be more expensive than Option 1 to 4 and has lower overall environmental performance. Option 5 is likely to produce an effluent which is BAT-AEL compliant.

5.1.26 This option changes a gravity storm runoff system to a pump and treat system with outflow. The following must therefore be considered:

- Complex design of bespoke Water Treatment Plant requiring multiple specialists:
  - . Full characterisation of existing drainage system and modifications thereof.
  - . Design of multiple pumping chambers including pump specification; pump design; operational pumping control; and contingency should pumps fail.
  - . Volume estimation of treatment system (See below).
  - . Detailed design of bespoke treatment plant and its operation (See below)
- Volume calculation for surface treatment tanks (detailed design)
  - . The cost benefit assessment has been based on annualised data and hence average rainfall figures have been used. For detailed design actual rainfall event data will have to be used and design criteria agreed with the regulator.
  - . The rainfall return period required to inform design criteria for attenuation / treatment has not been finalised. It is considered unrealistic to provide sufficient storage to allow the capture all water potential generated from all events (i.e. over specification of design),

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given the likely volumes (See bullet point 3c). EA agreement would be required regarding these criteria and storm overflow arrangements.

- . The system could be designed to try and remove first flush that would require smaller treatment volume (e.g. 1 in 5 year event). EA agreement would be required in relation to the storm overflow arrangements.
- . It is likely, therefore that a pump and treat system would have a component of untreated overflow from the treatment plant that could potentially fail BAT-AELs.
- . Design costs can only be determined by specialist water treatment specialist using detailed site-specific dataset. Only preliminary options have been considered and sizing implication evaluated.
- **Detailed Treatment Design:**
  - . Design costs can only be determined by the water treatment specialist and will be based on using detailed site-specific data. High level bench tests have been undertaken to date by Sims at considerable cost, but significant additional work would be required to inform final design.
  - . Full cost of treatment cannot be evaluated until considerable research work has been completed.
- **Construction of complex bespoke water treatment system requiring maintenance:**
  - . Sims would have to subcontract the inspection, servicing and general maintenance of the bespoke treatment system to a specialist subcontractor. This will incur significant OPEX, the costing of which is beyond the scope of this preliminary evaluation.
- **Land Take:**
  - . Potentially significant surface land take, depending on treatment volumes and design.
  - . There is limited available space on the site for large above ground treatment plant.
  - . The feasibility of any design with therefore depend on land availability.
- **Other considerations:**
  - . Small excavation may be required (associated with pumping chambers) and investigation and soil disposal costs will very small compared to subsurface Option 3 and 4.
- **Acceptability of storm / overflow bypass systems to sewer:**
  - . Acceptability to the EA needs to be determined.
- Full treatment to meet BAT-AELS could result in the emission to sewer being unacceptable to the SW Water under a TEC. This could lead requirement for alternative discharge arrangements for the treated water, the cost and/or feasibility of which is unknown.

## **Option 6 – Pump and Treatment via Accelerated Settlement and Flotation (DAFS)**

- 5.1.27 Option 6 is an above ground bespoke water treatment system. An overview of Option 6 has been provided in paragraphs 3.3.27 to 3.3.29.
- 5.1.28 The cost benefit analysis found this option to be the most expensive of all the options and has the lowest overall environmental performance. However, this option is most likely to produce an effluent which is BAT-AEL compliant. The environmental performance of this option had been discussed in paragraphs 4.2.6 to 4.2.11. The cost benefit analysis of Option 6 has been discussed in paragraph 4.3.6.
- 5.1.29 This option shares the same additional consideration highlighted for Option 5.

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## 5.2 Conclusion

5.2.1 Considerable work has been undertaken by Sims to inform the options assessment presented in this report. Despite these endeavours, no obvious simple treatment solution has been identified for the Rabone Lane facility to meet the new BAT AELs on the Permit. As each treatment option becomes more complex in nature, more detailed specialist information is required to obtain a meaningful understanding of required design, likely performance criteria for that design and the likely costs over the design lifespan.

5.2.2 In addition, several fundamental points have been identified that profoundly affect the outcome of the options assessment. The regulatory position regarding those points must be understood before a preferred treatment option determined and capital expenditure decisions made. Those points include:

- The general acceptability of a gravity drained storm water system for the Rabone Lane facility; and assuming that it is acceptable:
  - The acceptability of a high-flow storm overflow direct to sewer for gravity treatment options (Option 3 and 4); or
  - The design criteria for treatment volumes for pump and treat methodologies (Option 5 and 6) given it is not practicable to collect all rainfall runoff from the site.
- Determination of an acceptable sampling approach for the batch indirect discharge from the site, given that spot sampling is inappropriate for compliance purposes and the feasibility of reliable flow-proportional sampling approach is questionable. This means the way the BAT-AELs are applied to the Rabone Lane will affect the outcomes of the options assessment.
- The basis upon which the EA would accept alternative limits for lead and zinc to be determined for the site; and
- General acceptability of a overflow / bypass for subsurface stormwater option and surface pump and treat options.

5.2.3 The permit variation decision document provides the EA's position on the higher BAT AELs for lead and zinc available for shredder plants processing metal wastes and discounts this on the basis that the site processes hazardous waste, the permit allows for alternative emission limits to be agreed with the EA. The shredder at the Rabone Lane site will process metal wastes and during these periods the higher BAT AELs would appear appropriate. Given the permit position on these EALs a discussion on what the EA would accept under or otherwise agreed with the EA would be appropriate.

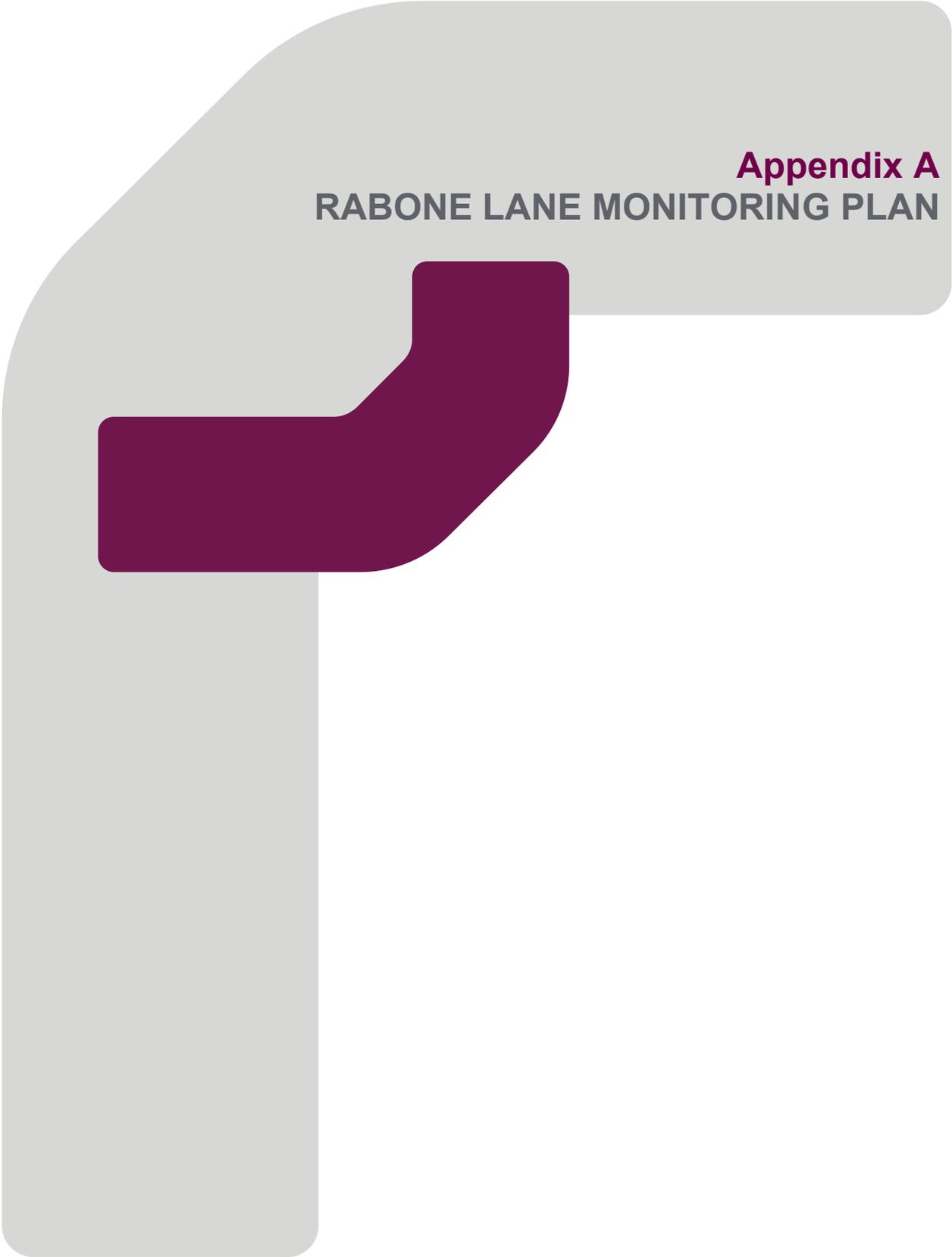
5.2.4 The uncertainty surrounding each option substantially increases as the proposed treatment options become more complex and this undermines the basis of option selection. In the absence of a clear treatment option for the Rabone Lane facility, a phased approach delivered through Improvement Conditions would appear to be the most pragmatic way forward. Such an approach would allow the baseline water quality to be properly determined and the required treatment outcome to be determined within a time frame that can met by the client given the amount of supporting work that is required. Once the positions above have been determined, the phased approach could include:

- Baseline water quality dataset and application of the AELs:
  - Assessment or appropriate sampling approach / sample type for the site for compliance with BAT-AELs given limitation of the drainage system on site.
  - Evaluation of methodology for deriving different limits for lead and zinc
  - Collection of additional baseline data and event data to understand water quality variability on the site.

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- Detailed assessment of the effectiveness of the use of simple in-line filters:
    - . Formal design of filter strategy for the system and agreed maintenance regime.
    - . Collection of extended dataset (in light of the above) to evaluate acceptability of the approach.
  - Detailed design for stormflow treatment system
    - . Data Collection: Detailed drainage review and runoff calculations
    - . Detailed design of size and capacity
    - . Full detailed costing
    - . Detailed cost-benefit analysis
  - Detailed design for pump and treat system
    - . Data Collection: Detailed lab testing; detailed drainage review and runoff calculations
    - . Optioneering of best treatment approach
    - . Detailed design of treatment plant including size and capacity
    - . Full detailed costing
    - . Detailed cost-benefit analysis

5.2.5 As discussed in paragraph 5.1.4, Sims are working towards completing further measures that assist with minimising metal contamination of rainwater run-off from the treatment plant and material storage areas.

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**Appendix A**  
**RABONE LANE MONITORING PLAN**

Smethwick\_Protocol for Monitoring Point Source Emissions to Foul Sewer at points S1 & S2.

This protocol is a written monitoring plan to meet the requirements of EPR/ZP3691ET IC6 and details proposals to undertake representative monitoring of the surface water discharged from points S1 and S2 shown on the plan in Schedule 7 including the parameters to be monitored, frequencies of monitoring and methods to be used.

Once approved by the Environment Agency, this protocol will be used to train nominated employees involved with the sampling of site drainage discharges to foul sewer. It will be available as a reference document / work instruction for all employees involved with the sampling of site drainage discharge to foul sewer. A copy will be provided to these employees as well as all Site Managers and Supervisors and will form an integral part of the sites Environment Management System.

The objective is to facilitate the gathering of representative water quality data for the surface water discharged to foul sewer for the purpose of assessing compliance with the trade effluent consent limits and environment permit.

This Work Instruction has been written with due regard to Environment Agency Guidance and Environment Agency Technical Guidance Note M18 (Monitoring) Monitoring of discharges to Water and Sewer, Version 5, October 2015.

**The site drainage**

The discharges from the site are to foul sewer and are shown on the Site plan in schedule 7 of the environment permit and extract below.

**Schedule 7 – Site plan**



S1 will consist of foul drainage from welfare facilities (kitchen, toilets) discharging to foul sewer on Rabone Lane. This discharge will be of domestic sewage and Severn Trent Water (STW) has confirmed this does not require a Trade Effluent Consent (TEC).

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S2 will consist of rainfall dependant surface water drainage run-off from the site surfacing, via an interceptor to foul sewer on Foundry Lane and is consented by STW as a Trade Effluent Consent Reference 008675V.

**The Protocol.**

The site drainage will be sampled in accordance with the following methodology:

a) **Sampling Frequency**

Samples will be taken quarterly in January, April, July & October.

The discharge from the site will be rainfall dependant and therefore there may be occasions when a sample is due to be taken, but it has not rained and it will not be possible to collect a sample as there is insufficient flow. In this event, the sample will be collected as soon as is practicable after the scheduled date.

b) **Sample Records**

A sampling record sheet will be completed at the time of sampling to record the following information: Date & time of sampling, name of sampler, flow conditions during sampling and a description of the sample (colour, odour, appearance etc). An example and a blank form are provided in Appendix 1. Copies of completed records will be available on site. Laboratory Reports will be kept on site.

c) **Sampling locations**

S2 – Manhole covered sample chamber located immediately downstream of the interceptor prior to discharge from site to foul sewer on Foundry Lane.

S1 – domestic sewage from toilets and washing facilities only and does not include site drainage. This will not be sampled.

d) **Monitoring Strategy**

Periodic monitoring will consist of discrete spot samples of effluent collected and preserved in accordance with the recommendation of the contracted laboratory. A spot sample is a discrete sample of the discharge and assesses the quality at that particular moment in time. This method of sampling is the most appropriate method for sampling intermittent discharges to assess compliance with trade effluent consents or permit conditions. The methodology detailed below will be adhered to.

e) **Employee Training & Responsibility**

All relevant employees will receive instruction and training in respect of this Monitoring protocol.

The nominated employee will be responsible for collecting, recording and dispatching samples to the laboratory in accordance with this protocol.

The Site Manager will have overall responsibility for ensuring that the nominated employee is monitoring in accordance with the protocol. The competency of the nominated employee will be reviewed by observations e.g. Safety Conversations and Job Cycle Checks.

The Site Manager will have overall responsibility for review of results, non-conformities, actions taken, record keeping and reporting.

f) **Health & Safety Considerations**

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Sampling will be undertaken with due regard for Health and Safety considerations, such as manual handling, PPE and safe access to monitoring location etc. Advice will be sought from Health & Safety advisor and a risk assessment will be undertaken.

Employees responsible for sampling will inform a supervisor or line manager when they are going to take a sample and when they expect to be back.

Employees will never enter into the sample chamber to be sampled. They will never leave an open manhole or chamber unguarded or unattended.

**g) Sampling Equipment**

The sample bottles and storage crates/cool boxes will be provided by the laboratory. Appropriate sampling equipment will be utilised e.g. dedicated sample rod & container.

**h) Quality Control**

Laboratories will have appropriate ISO, UKAS and MCERTS accreditation. UKAS accreditation to MCERTS for ISO 17025 available for sampling and analysis and MCERTS Laboratory equipment use covered by ISO 17025.

Only sample bottles provided by the laboratory will be used to contain the samples. The laboratory will be called in advance to arrange for the required number of sets of sample bottles and chain of custody forms to be delivered and a collection time arranged. Employees will check they have all the required equipment before commencing sampling.

Employees will ensure that the seal on the plastic bottle is not broken prior to use. If the seal is not intact the bottle will not be used. Glass bottles may not be sealed as they are reusable. Please ensure the glass bottles do not contain residue before use. NB. Some bottles will contain preservatives but this will be clearly marked on the bottle. Employees will always read the labels and instructions on the bottles.

Samples will be stored appropriately and sent to the laboratory within the designated stability periods as advised by the Laboratory.

Duplicate samples, sometimes referred to as split samples will be submitted for laboratory analysis as a method of assessing sampling uncertainty.

**i) Sampling Methodology**

Courier collection will be arranged in advance so the samples will not be retained unnecessarily on site pending collection.

A spot sample will only be collected when there is a flow. Samples will not be taken of standing water. The discharge from site will be weather dependant, spot samples will be collected during or after rain fall events.

Samples will only be taken from the identified sampling location S2.

A dedicated sampling rod with container attachment will be used for the purpose of collecting a sample. Employees will ensure it is clean before use and rinse it several times in the discharge to be sampled before collecting the sample.

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Samples will be collected away from the sides and bottom of the channel to avoid contamination of the sample with any sediment and biological growths.

Care will be taken when lifting manhole lids to avoid contamination of the sample by the disturbance of deposits from the cover when the cover is lifted and prevent contamination of the sample from the chamber walls and any bottom deposits.

Laboratory provided sample bottles should not be rinsed before filling unless specified by the laboratory. Bottles containing preservatives will not be rinsed. Bottles containing preservatives will be marked for example 'Contains Sodium Thiosulphate' and will have the necessary hazard warning stickers such as 'Corrosive' or 'Irritant' on the bottle. These bottles will also be accompanied by COSHH data or Material Safety Data Sheets (MSDS).

Sample container(s) will be filled in accordance with laboratory instructions. It may be necessary in some cases to fill the bottle completely (to avoid loss of volatile compounds) or to leave space for preservatives etc. If there is no laboratory guidance or instructions on the bottle, the bottles will be filled completely. The bottle will be tightly sealed so that the sample will not leak in transit and in order that it cannot be contaminated or alter significantly prior to analysis.

Collecting a duplicate sample will involve filling two sets of sample bottles simultaneously so that it has the effect of one spot sample being split over two separate samples for analysis. These will be labelled as separate samples so the laboratory is not aware of their duplicate nature. Duplicate samples will be collected for 25% of samples i.e. one quarter each year.

A check will be made that the sample is of a sufficient size – i.e. the correct number & type of sample containers have been filled.

Each sample container/bottle will be labelled with the Company name, site name, sample location reference, unique sample reference, date and time of sample and initials of sampler. For example Sims Group, Rabone Lane, S2, 10.10.16 @ 10.00hrs, CH. A description of the sample will be completed on the Sampling Record Form, Appendix 1.

Samples will be packaged in a way to avoid damage or spillage in transit in the cool boxes and packaging provided by the laboratory.

The necessary paperwork will be included with the samples – the laboratory chain of custody form will be completed and the site will keep a copy for their records. Sample matrix will be specified to enable the Laboratory to select the appropriate MCERTS UKAS accredited analysis.

The sample(s) will be kept cool, in the dark and submitted to the laboratory as soon as possible, within 24hrs of sampling or as specified by the laboratory sample stability requirements. If overnight storage is required, the samples will be kept in designated cool boxes or refrigerated. They will not be stored alongside food or drinks.

#### j) **Sample Analysis**

Samples will be sent to laboratory for analysis. Analysis will be undertaken for the parameters specified in the trade effluent consent and repeated below in section I), with additional analysis for dissolved metals. Limits of detection will be adequate to enable comparison with consent limits.

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The laboratory will send a receipt confirming the samples have been received and the analysis to be undertaken. This will have a reference/ job number. The details will be checked and the laboratory contacted immediately if any errors are detected.

**k) Sample Results**

Sample results should normally be received within 10 working days. The laboratory will be contacted quoting reference/job number if the results are not received within these timescales.

Results will be reviewed versus Trade Effluent Consent Limits upon receipt and where necessary actions taken as required.

**l) Trade Effluent Consent 008675V Quality Conditions/ consent limits**

Parameter	unit	Quality Conditions
Suspended Solids	mg/l	1000
pH	Unit	>6 <10
COD	mg/l	1000
Iron	mg/l	50
Aluminium	mg/l	50
Chromium	mg/l	1
Copper	mg/l	3
Lead	mg/l	4
Nickel	mg/l	1
Zinc	mg/l	10
Tin	mg/l	1
Ammoniacal Nitrogen	mg/l	50
NVM	mg/l	25
Phosphorus	mg/l	25
Antimony	mg/l	0.1
Cadmium	mg/l	0.05

**m) Actions in the event of a breach of Quality Conditions/ Consent limit**

In the event of a consent limit being exceeded the following action will be taken.

Senior Management and the Environment Advisors will be informed.

The source of the exceeded trigger level will be investigated and identified and remedial action will be taken, if required, to prevent reoccurrence.

Where required, further samples will be collected to monitor the situation or confirm effectiveness of maintenance/ improvement.

The EA will be notified using the appropriate agreed method.

**n) Site Records**

Sample records & laboratory results will be filed in site records along with any correspondence relating to the sampling. These records will be available on site for the life of the site.

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APPENDIX 1 - SAMPLE RECORD SHEET EXAMPLE

SITE NAME: Smethwick Rabone Lane

Unique sample reference	Date and time	Sample location	Flow conditions	Colour	Odour	Appearance	Visual oil or grease	Comments & observations	Weather conditions	Sampler initials
n/a	05.10.16 @ 11:00	S2	No flow visible	N/A	N/A	N/A	N/A	Insufficient flow to sample	Showers, previous week dry.	CH
SRL001	10.10.16 @ 09:30	S2	Moderate	None - Clear	Slightly earthy odour	Some particles suspended but otherwise clear	None	None	Heavy rain, persistent for days	CH
SRL002	08.01.17 @ 10:30	S2	Low	Light Grey tinge	None	Slightly cloudy	Yes – slight rainbow sheen on surface	Visual monitoring pending results	Showers, previous week dry.	CH
SRL003										
SRL004										
SRL005										

Notes on completing the sample record sheet.

- ‘Unique sample reference’ – please give each of your samples a unique reference number.
- ‘Flow conditions’ – please use your judgement to best describe the flow as either No flow, very low, low, moderate, high or very high.
- ‘Odour’ - odours are subjective but describe to the best of your ability – for example smells muddy, smells like rotten eggs or smells like wet dogs.
- ‘Appearance’ - describe the appearance of the sample from clear & transparent to cloudy & opaque. Please describe the sample using words such as clear, cloudy or opaque.
- Visual oil or grease’ – Yes or None. If ‘Yes’ please provide detail. For example slight rainbow sheen on surface or oily residue present in sample etc.
- ‘Comments and Observations’ please note any actions taken – for example no sample taken.
- ‘Weather condition’ - Please detail conditions prior to and at the time of sampling.

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APPENDIX 1 - SAMPLE RECORD SHEET

SITE NAME: Smethwick Rabone Lane

Unique sample reference	Date and time	Sample location	Flow conditions	Colour	Odour	Appearance	Visual oil or grease	Comments & observations	Weather conditions	Sampler initials

Notes on completing the sample record sheet.

- 'Unique sample reference' – please give each of your samples a unique reference number.
- 'Flow conditions' – please use your judgement to best describe the flow as either No flow, very low, low, moderate, high or very high.
- 'Odour' - odours are subjective but describe to the best of your ability – for example smells muddy, smells like rotten eggs or smells like wet dogs.
- 'Appearance' - describe the appearance of the sample from clear & transparent to cloudy & opaque. Please describe the sample using words such as clear, cloudy or opaque.
- Visual oil or grease' – Yes or None. If 'Yes' please provide detail. For example slight rainbow sheen on surface or oily residue present in sample etc.
- 'Comments and Observations' please note any actions taken – for example no sample taken.
- 'Weather condition' - Please detail conditions prior to and at the time of sampling.

<b>Reference</b>	SMM UK_Smethwick_Protocol for Monitoring Point Source Emissions to Foul Sewer at S1 and S2	<b>Page number</b>	Page 7 of 8
<b>Authorised by</b>	EA Approval by email 05.01.17	<b>Issue date</b>	December 2016

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**Appendix B**  
**WATER QUALITY MONITORING DATASET**

Parameter	Unit	BAT AEL / PERMIT Limit*	TEC Limits	13/3/2023 STW	10/3/2023 Sims	06/04/2023 STW	11/05/2023 STW	11/05/2023 Sims	14/08/2023 STW	15/08/23 Sims	20.09.23 Sims	11.10.23 STW	09.02.24 STW	09.02.24 SIMS	Sims 12.03.24	STW 12.03.24	STW 09.04.24	Sims 09.04.24	Sims 22.05.24	STW 22.05.24
Suspended Solids	mg/l		1000	124	53	254	332	322	170	141	129	151	1230	652	384	444	472	402	376	372
Ammoniacal Nitrogen	mg/l		50	5.84	5.89	8.65	3.28	4.35	9.61	10	60.3	37.9	5.52	4.58	2.02	1.65	1.28	1.19	1.79	1.69
Iron total as Fe	mg/l		50	8.1	3	18	29	29.4	22	20.1	21.8	22	81	62.5	58.4	38.6	61.4	59.1	48.4	46.3
Iron filtered as Fe	mg/l				0.056			6.1		4.6	6.57			3.5	1.06	0.0126		0.963	0.999	
Aluminium total as Al	mg/l		50	3	1.3	9.7	9.2	13.9	2.8	2.6	1.4	2	13.7	11	7.54	4.93	6.96	8.15	5.55	4.55
Aluminium filtered as Al	mg/l				0.069			0.022		0.023	0.016			0.0311	0.0409	0.0311		0.0339	0.033	
Cadmium total as Cd	mg/l	0.05	0.05	0.017	0.00943	0.05	0.041	0.042	0.014	0.012	0.0028	0.016	0.0773	0.0738	0.0238	0.0178	0.0333	0.0352	0.0403	0.0361
Cadmium filtered as Cd	mg/l			0.00012	0.00056	0.00004	0.00043	0.00002		0.00003	<0.00002		0.00108	0.0007	0.00101	0.00102	0.00032	0.00021	0.00088	
Chromium total as Cr	mg/l	0.15	1	0.033	0.0099	0.057	0.047	0.054	0.026	0.021	0.017	0.022	0.156	0.108	0.0547	0.0369	0.0455	0.0527	0.0494	0.0451
Chromium filtered as Cr	mg/l			0.0004	0.0014	0.0004	0.0003	0.00042		0.00044	0.0013		0.0018	0.0016	0.00075	0.0008	0.0004	0.0004	0.00037	
Copper total as Cu	mg/l	0.5	3	0.25	0.166	0.47	0.5	0.484	0.18	0.171	0.15	0.24	1.57	1.23	0.662	0.472	0.495	0.608	0.473	0.423
Copper filtered as Cu	mg/l			0.004	0.018	0.004	0.004	0.0004		<0.004	<0.004		0.016	0.011	0.02	0.012	0.0063	0.0045	0.0092	
Lead total as Pb	mg/l	0.1	4	0.25	0.104	0.68	0.78	0.736	0.22	0.185	0.173	0.33	7	6.7	1.47	1.13	1.44	1.6	0.477	0.455
Lead filtered as Pb	mg/l			0.0013	0.0024	0.0006	0.0061	0.0003		0.00031	<0.0003		0.052	0.0361	0.012	0.0126	0.0026	0.0031	0.0024	
Nickel total as Ni	mg/l	0.5	1	0.054	0.029	0.096	0.12	0.109	0.062	0.054	0.073	0.074	0.407	0.322	0.142	0.103	0.197	0.222	0.139	0.127
Nickel filtered as Ni	mg/l			0.017	0.02	0.2	0.019	0.0072	0.021	0.015	0.03		0.056	0.0658	0.0455	0.039	0.021	0.026	0.0212	
Zinc total as Zn	mg/l	1	10	3.4	2.41	5.2	5.8	8.83	2.9	2.5	2.65	3.7	22.3	17.2	6.95	5.52	6.14	6.79	13.7	12.7
Zinc filtered as Zn	mg/l			0.34	1.05	0.017	0.081	0.024	0.13	0.065	0.029		1.39	1.39	0.805	0.623	0.159	0.147	0.439	
NVM extract by light petroleum	mg/l		25			29.6	35.5		15	6.16	3.08	9.2	<5			31.5	1.28			8.9
Phosphorus total as P	mg/l		25	0.46	0.56	1.2	0.85	0.81	0.72	0.74	3.6	1.4	1.72	1.77	0.834	0.718	0.464	0.506	0.53	0.469
Tin total as Sn	mg/l		1	0.055	0.019	0.071	0.15	0.14	0.092	0.094	0.098	0.2	0.147	0.162	0.37	0.345	0.193	0.231	0.14	0.186
Tin filtered as Sn	mg/l				0.0041			0.0015		0.0015	0.0048			0.0079	0.0151			0.0023	0.0023	
Antimony total as Sb	mg/l	0.1	0.016	0.011	0.016	0.016	0.0089	0.016	0.0053	0.0055		0.016	0.0172	<0.160	0.0108 *		N/A	0.0078	0.0077	0.016
Antimony filtered as Sb	mg/l				0.009			0.0013		0.0015	0.0099			0.0114	0.0049 *				0.0023	
COD 1 hr	mg/l		1000	300	531	166	134	382	121	172	196	141	243	611	272	359	165	273	279	177
pH	unit		6to10	8.5	7.3	7.8	7.3	7.3	7.8	7.4	7.6	7.5	8.2	7.1	7.1	7.4	7.5	7.4	7.7	7.7
TOC as C	mg/l				158			36.3		28.5	44.6			97.2	101					35.8
Arsenic total as AS	mg/l	0.05			0.0021			0.0036		0.0024	0.0033			0.0123	0.00455			0.00457	0.00362	
Arsenic, filter as AS	mg/l				0.0014			0.0007		0.0015	0.0011			0.002	0.0007			0.0005	0.0005	
Mercury Hg	mg/l	0.005			0.00052			0.00022		<0.0002	<0.00010			0.00037	<0.0002			0.00115	0.00084	
Mercury, Filtered as Hg	mg/l				0.00051			0.00023		<0.0002	<0.00010			<0.0002	<0.0002			0.0011	0.00092	
Aliphatic C10 - C12	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aliphatic C12 - C16	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aliphatic C16 - C35	ug/l				146			21		<21		424		<100		882		90	<100	
Aliphatic C35 - C44	ug/l				34			20		<20		83		<100		132		<40	<100	
Aliphatic C10 - C44	ug/l				180			21		<21		508		<100		1010		90	<100	
Aromatic C10 - C12	ug/l				20			20		<20		42		<100	<100			<40	<100	
Aromatic C12 - C16	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aromatic C16 - C21	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aromatic C21 - C35	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aromatic C35 - C44	ug/l				20			20		<20	<40			<100	<100			<40	<100	
Aromatic C10 - C44	ug/l				20			20		<20		42		<100	<100			<40	<100	
HOI /Total EPH	mg/l	10			0.18			21		0.0021	0.549			<100		1.01		0.09	<100	
Conductivity- Electrical 20C	uS/cm				1250			977		1090	1680			1160	812			603	531	
Oil and Grease (W-TEC-IR)	mg/l				7.18			22.3		6.16	3.08			51.9	1.34			0.453	0.627	
Tested by STW or Sims	n/a									sims			STW		Sims			Sims		STW
* no result / parameter not tested		12.355	2220.15	454.33782	2541.40332	501.81204	558.69483	2054.92579	352.591	1492.41508	3259.8437	376.598	1616.33138	2689.91607	3682.93771	896.15482	724.61742	1545.62343	1302.93893	632.5972

N/R sample bottles not filled and submitted, lab unable to assess

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## Appendix C DRAINAGE PLAN



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 Notes  
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**Legend**

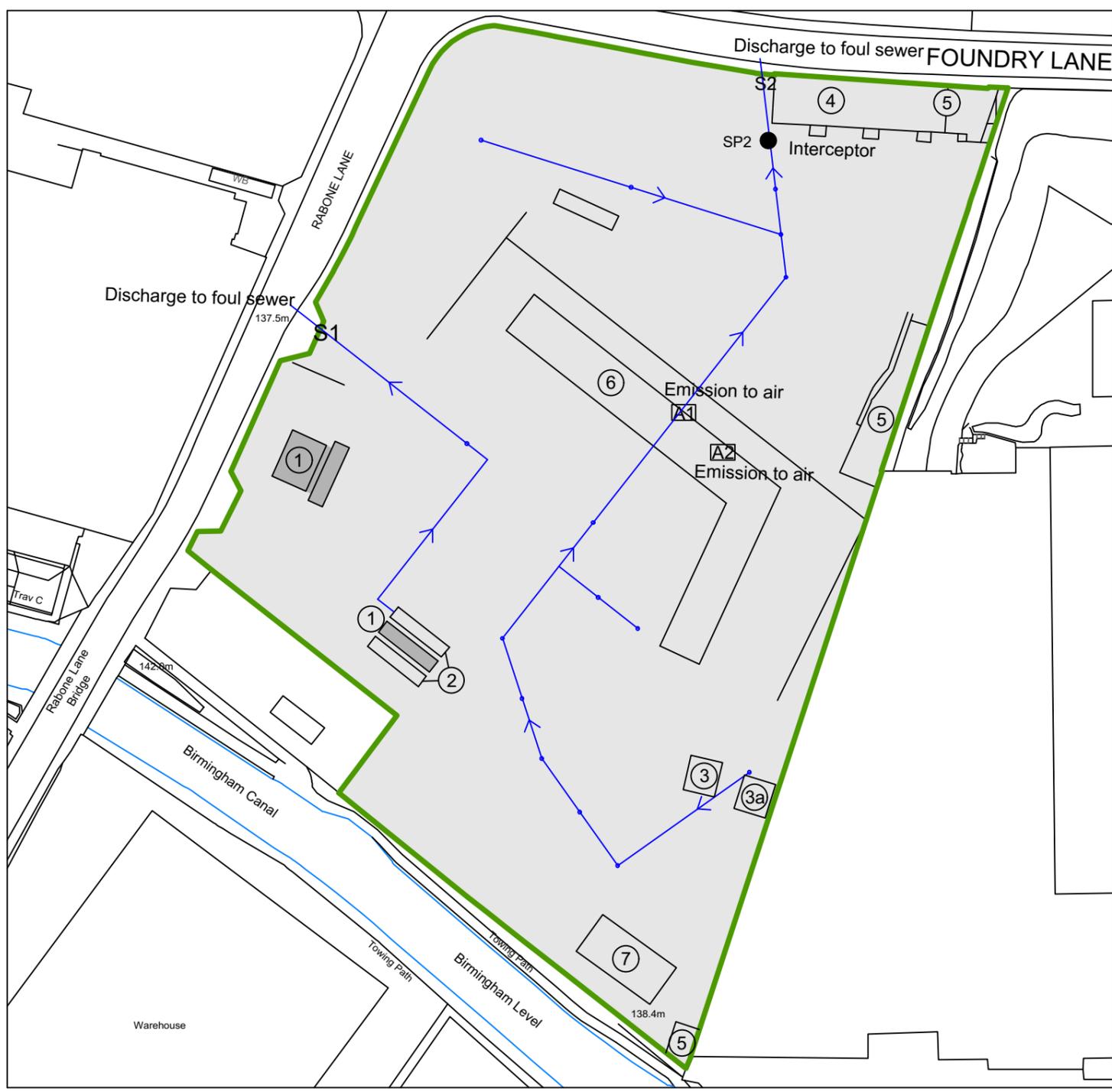
— Site Boundary

**Legend**

- 1: Office's
- 2: Weighbridge
- 3: Pre-Shredder
- 3a: Pre-shredder hydraulic room
- 4: Separation Plant (Not in Use)
- 5: Sub-Station
- 6: Shredder Plant

— Site Drainage (with flow direction)

- A1 - Emission point to air and monitoring point
- A2 - Emission point to air and monitoring point
- SP2 - sampling point for S2



Basemap sourced from SIMS Drawing No. CJBSMETH\_009\_R3 Rev 003 (22/05/2013)

Rev	Description	By	Ch	Date



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Project Rabone Lane, Birmingham

Title Fire Prevention Plan - Site Layout

Status DRAFT Drawn By AJC PM/Checked by -

Job Ref JER6361 Scale @ A3 1:1250 Date Created April 2022

RPS Drawing/Figure Number 10669-0014-02 Rev -

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# SIMS RABONE LANE METALS RECYCLING FACILITY

## Assessment of BAT for Emissions to Sewer.

2024-10-23

JER9144

1

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