



Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Packcare Limited

Avonmouth Treatment Centre
Avonmouth Way West
Avonmouth
Bristol
BS11 9EX

Variation application number

EPR/KP3937DU/V004

Permit number

EPR/KP3937DU

Avonmouth Treatment Centre

Permit number EPR/KP3937DU

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.

This variation has been issued to update the permit following a statutory review of the permits in the industry sector for incineration. The opportunity has also been taken to consolidate the original permit and subsequent variations. The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) conclusions as described in the Commission Implementing Decision. The BAT conclusions for incineration were published on 03 December 2019 in the Official Journal of the European Union (L323) following a European Union wide review of BAT, implementing decision 2017/2117/EU of 21 November 2017.

The schedules specify the changes made to the 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. All the conditions of the permit have been varied and are subject to the right of appeal.

Brief description of the process

This permit controls the operation of a waste incineration plant. The relevant listed activity is 5.1 A(1)(a). The permit implements the requirements of the EU Directives on Industrial Emissions and Waste.

The main features of the permit are as follows:

Furnace technology	Conveyor fed chamber
Number of lines	1
Principal waste type	Hazardous waste (drums)
Stack height	20 m
Permitted plant capacity	9,000 tonnes per year

The purpose of the facility is the decontamination of nominally empty steel drums containing a residue of organic and/or inorganic contaminants which cannot easily be removed via other physical means.

On arrival, drums are first compared against the paperwork supplied, to ensure they can be accepted by the facility. Once they have been defined as acceptable, they are stored in a drum store until selected for incineration. Drums either go directly to the furnace or they go via a spiking machine and shredder. Immediately prior to incineration, drums that go directly to the furnace have the top removed, and the contents are again checked. Any free-flowing liquids are removed from the drum at this point and bulked up in other containers following compatibility testing, hazardous and non-hazardous wastes are kept separate. The drums are then loaded onto a chain-driven furnace feed. Other drums are loaded onto the chain driven feed to the spiking machine which de-heads the drums and pierces the drum eight times near the base. The

drum is then fed into the shredder where a dosing system feeds shredded, smaller packaging, into the drums. The drums continue on the chain feed into the furnace.

The drums then enter the gas-fired furnace and are heated for a given residence time (60 to 100 seconds) at a given temperature (550 to 800°C), with an afterburner operating at a minimum of 850°C. The drums which have not been spiked, are inverted in order that any ash resulting from the combustion process, as well as any unburnt materials, are collected in a water-filled sump underneath the furnace chamber. This sump is filled with water to prevent auto-ignition.

Emissions are released from the main incinerator stack, point A1, which vents to atmosphere at a height of 20m via a bag-filter plant incorporating a hydrated lime dosing system to neutralise acid gases. Following the incineration process, the drums are either crushed using a mechanical crusher and are automatically loaded into skips, despatched off-site to a specialised metal recycling facility or they are shot blasted and despatched off site for re-use. Emissions from the shot blaster are discharged via a stack, point A2.

The installation processes up to 9,000 tonnes of metal drums per year.

Hazardous and non-hazardous wastes accepted for storage and transfer are primarily packaged when they are received at the site. Following waste acceptance checks, the wastes are transferred to the relevant storage area appropriate for the type of waste. Wastes are stored in external or internal bays, or in secure containers.

There are no discharges from the facility to controlled waters. All surface water run-off from bunded and non-bunded areas is discharged to the Wessex Water sewer at point S1, via a three-stage interceptor, pH adjustment and a horizontal holding tank. The system has inbuilt stop-valves to retain effluent if required.

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

Status log of the permit		
Description	Date	Comments
Application received FP3235SY	Received 21/03/05	
Response to request for information	09/06/05	
Permit determined FP3235SY	15/12/05	
Transfer application QP3638UP	Received 16/04/07	Application to transfer the permit in full to pack2pack UK Limited.
Transfer determined QP3638UP	31/05/07	Full transfer of permit complete.
Variation application EPR/QP3638UP/V002	Received 25/11/14	Application to change Operator name from pack2pack UK Limited to Earthminded UK Ltd.
Variation determined EPR/QP3638UP	02/12/14	Varied permit issued.
Transfer application EPR/WP3431RT/T001 (full transfer of permit EPR/QP3638UP)	Duly made 03/03/16	Application to transfer the permit in full from Earthminded UK Ltd to WasteCare Limited.
Transfer determined EPR/WP3431RT	29/04/16	Full transfer of permit complete.

Status log of the permit		
Description	Date	Comments
Transfer application EPR/KP3937DU/T001(full transfer of permit EPR/WP3431RT)	Duly made 14/11/16	Application to transfer the permit in full to Packcare Limited.
Transfer determined EPR/KP3937DU	22/12/16	Full transfer of permit complete.
Application EPR/KP3937DU/V004 (variation and consolidation)	Duly made 07/03/18	Application to vary and update the permit to modern conditions.
Further information received	09/10/18 02/11/18	Response to Schedule 5 Notice dated 31/07/18
Further information received	07/02/19 20/03/19	Response to Schedule 5 Notice dated 04/12/18
Further information received	17/04/19	Amended operating procedures and Fire Prevention Plan
Further information received	16/07/19	Revised site plan
Variation determined EPR/KP3937DU/V002	16/07/19	Varied and consolidated permit issued.
Application EPR/KP3937DU/V003 (Variation)	Duly made 15/8/19	Application to vary activities to include briquetting Polystyrene, shot blasting metal drums and crushing metal drums, and to include the drum crusher under the A2 emission point
Further information received	30/12/19	Response to Schedule 5 Notice dated 12/12/19
Variation determined EPR/KP3937DU/V003	31/01/20	Permit variation issued
Regulation 61 notice issued	08/07/22	Regulation 61 Notice requiring information for Statutory review of permit. BAT Conclusions published 03 December 2019.
Regulation 61 notice response	13/01/23	
Variation issued EPR/KP3937DU/V004	20/11/23	Varied and consolidated permit issued as result of the permit review

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/KP3937DU

Issued to

Packcare Limited (“the operator”)

whose registered office is

Argent House

Tyler Close

Normanton

WF6 1RL

company registration number 00538863

to operate regulated facilities at

Avonmouth Treatment Centre

Avonmouth Way West

Avonmouth

Bristol

BS11 9EX

to the extent set out in the schedules.

The notice shall take effect from 20/11/2023

Name	Date
Principal Permitting Team Leader	20/11/2023

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit 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

EPR/KP3937DU

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/KP3937DU/V004 authorising,

Packcare Limited (“the operator”),

whose registered office is

Argent House

Tyler Close

Normanton

WF6 1RL

company registration number 00538863

to operate an installation and waste operations at

Avonmouth Treatment Centre

Avonmouth Way West

Avonmouth

Bristol

BS11 9EX

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

Name	Date
Principal Permitting Team Leader	20/11/2023

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.
 - (c) referenced in schedule 1, table S1.1 (AR1), from 03/12/2023, in accordance with a written other than normal operating conditions (OTNOC) management plan.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 The operator shall review the written management system at least every 3 years or otherwise as requested by the Environment Agency.
- 1.1.4 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.
- 1.1.5 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 (AR1 to AR5) the operator shall:
- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and 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 (AR1 to AR5) 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 (AR1 to AR5) waste authorised by this permit shall be clearly distinguished from any other waste on the site.
- 2.1.3 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.

2.2 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 specified in schedule 1, table S1.2 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 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4, S2.5; and
 - (b) it conforms to the description in the documentation supplied by the producer or 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.
- 2.3.7 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall burn only those hazardous wastes where the throughputs, calorific values and pollutant compositions are within the ranges specified in table S2.2 of schedule 2, unless otherwise agreed in writing with the Environment Agency.
- 2.3.8 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall ensure that prior to accepting waste subject to condition 2.3.7 at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition 2.3.7.
- 2.3.9 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall take representative samples of all hazardous waste deliveries to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition 2.3.8. These samples shall be retained for inspection by the Environment Agency for a period of at least 1 month after the material is incinerated and results of any analysis made of such samples will be retained for at least 2 years after the material is incinerated.
- 2.3.10 For the following activities referenced in schedule 1, table S1.1 (AR1) waste shall not be charged if:
- (a) the combustion chamber temperature is below 850 °C,
 - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded during abnormal operation; or
 - (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or
 - (d) continuous emission monitors to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than during abnormal operation; or
 - (e) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.
 - (f) continuous emission monitors to demonstrate compliance with the emission limit values for particulates, TOC or CO in schedule 3 are unavailable unless alternative techniques, as agreed in writing with the Environment Agency, are used to demonstrate compliance with those emission limit values.
- 2.3.11 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall record the beginning and end of each period of “abnormal operation”.
- 2.3.12 For the following activities referenced in schedule 1, table S1.1 (AR1) during a period of “abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as soon as possible.
- 2.3.13 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall interpret the start of the period of “abnormal operation” as the earliest of the following:
- (a) a technically unavoidable stoppage, disturbance, or failure of continuous emission monitors.

- (b) a technically unavoidable stoppage, disturbance, or failure of the activated carbon abatement system
 - (c) Any other technically unavoidable stoppage, disturbance, or failure of the plant which is causing or could lead to an exceedance of an emission limit value in table S3.1.
- 2.3.14 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall interpret the end of the period of “abnormal operation” as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
 - (b) when the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;
 - (c) The failed equipment has not been repaired and brought back into normal operation and a single period of abnormal operation reaches a duration of 4 hours after the start of abnormal operation on an incineration line
 - (d) Abnormal operation occurs on an incineration line and the cumulative duration of abnormal operation periods over 1 calendar year has reached 60 hours on that incineration line;
- 2.3.15 For the following activities referenced in schedule 1, table S1.1 (AR1) the operator shall have at least one auxiliary burner in each line which shall be operated at start up, shut down and as required during operation to ensure that the operating temperature specified in condition 2.3.10 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.10 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.16 Bottom ash and APC residues shall not be mixed.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 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.

2.5 Pre-operational conditions

- 2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

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, subject to condition 3.2.1, shall not be exceeded.

- 3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.4. Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
 - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

3.2 Emissions limits and monitoring for emission to air for incineration plant

- 3.2.1 The limits for emissions to air apply as follows:
- (a) The limits in table S3.1 shall not be exceeded except during periods of abnormal operation.
 - (b) The limits in table S3.1 (a) shall not be exceeded during abnormal operation.
- 3.2.2 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1 and S3.1(a); the Continuous Emission Monitors shall be used such that;
- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages of the emission limit values:

• Carbon monoxide	10%
• Sulphur dioxide	20%
• Oxides of nitrogen (NO & NO ₂ expressed as NO ₂)	20%
• Particulate matter	30%
• Total organic carbon (TOC)	30%
• Hydrogen chloride	40%
• Ammonia	40%
 - (b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.2.2 (a).
 - (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour or 10 minute period, the half-hourly average or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
 - (d) daily average values shall be calculated as follows:
 - (i) the average of valid half hourly averages or 10 minute averages over a calendar day excluding half hourly averages or 10 minute averages during periods of abnormal operation. The daily average value shall be considered valid if no more than five half-hourly average or fifteen 10-minute average values in any day have been determined not to be valid;
 - (e) no more than ten daily average values per year shall be determined not to be valid.

3.3 Emissions of substances not controlled by emission limits

- 3.3.1 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.
- 3.3.2 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.
- 3.3.3 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.
- 3.3.4 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.

3.4 Odour

- 3.4.1 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.
- 3.4.2 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.

3.5 Noise and vibration

- 3.5.1 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.
- 3.5.2 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.

3.6 Monitoring

- 3.6.1 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, S3.1(a) and S3.2;
 - (b) process monitoring specified in table S3.3;
 - (c) residue quality in table S3.4.
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and unless otherwise agreed in writing by the Environment Agency have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges. Newly installed Data handling and acquisition systems (DAHS), or DAHS replacing existing DAHS, shall have MCERTS certification.
- 3.6.4 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, S3.1(a), S3.2 unless otherwise agreed in writing by the Environment Agency.

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 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 (AR1 to AR5) 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 using the annual report form specified in schedule 4, table S4.4 or otherwise in a format agreed with the Environment Agency. 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;
- (c) the performance parameters set out in schedule 4 table S4.3
- (d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.

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 quarter, 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 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 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 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.
- 4.3.4 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.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 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.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

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.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S5.1 A1 (a)	The incineration of hazardous waste in a waste incineration plant with a capacity of 10 tonnes per day or more.	<p>From receipt of waste to emission of exhaust gas and removal from site of waste arising including:</p> <ul style="list-style-type: none"> • Storage of waste drums prior to treatment. • Pre-treatment of drums comprising decanting of liquid residues and removal of sludges including chemical treatment of amine and pesticide wastes. • Pre-treatment of small metal containers (less than 205 litre size) comprising shredding. • Storage of hazardous and non-hazardous wastes from decanting of liquid residues and sludge removal prior to off-site disposal or recovery. • Storage prior to off-site disposal of air pollution control and furnace bottom ash residues. • Crushing of metal containers after treatment. • Shot blasting of cleaned drums in the shot blaster. <p>The total amount of waste stored on site at any one time, including both hazardous and non-hazardous waste, shall not exceed 1,000 tonnes.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p>

			<p>All other wastes shall be stored on site for no longer than 6 months.</p> <p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those wastes specified in Schedule 2, Table S2.2.</p>
AR2	S5.3 A(1)(a)(iv) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging	<p>Repackaging of hazardous waste.</p> <p>R12 Exchange of waste for submission to any of the operations numbered R1 to R11 (repackaging)</p> <p>D14 Repackaging prior to submission to any of the operations numbered D1 to D13</p>	<p>Repackaging is limited to:</p> <ul style="list-style-type: none"> • taking a waste package (for example a bag, jar, drum or box) out of one cart or bulk container (for example a skip) and placing it into another cart or bulk container (for example, a skip) • taking a waste package from a cart or bulk container (for example, skip) and placing it onto a pallet or vehicle • taking a waste package from a pallet and placing it into a cart or bulk container (for example, skip) • transferring, removing or separating waste from its primary packaging (for example container, bags, bins, boxes). <p>Healthcare waste and asbestos waste shall not be transferred, removed or separated from its original packaging.</p> <p>Wastes that are combined together during repackaging activities shall have the same EWC code and similar chemical composition.</p> <p>The repackaging of wastes shall not result in:</p> <ul style="list-style-type: none"> • any incompatible wastes being repackaged together in the same container • a reaction of repackaged wastes with each other • a reaction with the container in which the wastes are being placed <p>Repackaging shall take place undercover or in a building, on impermeable surfacing with sealed drainage.</p> <p>Fugitive emissions shall be minimised during repackaging.</p>

			<p>Repackaging of waste shall not change either the maximum storage times for waste on site or the amount that can be stored at any one time.</p> <p>No waste types shall be submitted to this activity other than those hazardous wastes specified in Schedule 2, Table S2.3.</p>
AR3	S5.6A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes	<p>Temporary storage of hazardous waste.</p> <p>R13: 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>D15 Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)</p>	<p>From receipt and storage of hazardous waste on site to its repackaging on site; or its transfer off-site.</p> <p>The amount of hazardous waste stored on site at any one time shall not exceed 600 tonnes.</p> <p>No waste shall be treated, blended, mixed, or compacted on site.</p> <p>Waste shall only be stored in the designated areas shown on site plan in schedule 7.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p> <p>18 01 and 18 02 wastes shall be stored securely within designated areas of the building.</p> <p>Aerosol canisters shall be securely stored under cover in well-ventilated containers, and within a caged storage area. Up to 16 cubic metres of aerosol containers shall only be stored for up to 3 months. All other wastes shall be stored on site for no longer than 6 months. Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those hazardous wastes specified in Schedule 2, Table S2.4.</p>

Directly Associated Activities			
Activity reference	Description of activities for waste operations		Limits of activities
AR4	-	Storage, pH adjustment, oil/interception/removal and discharge of process effluent	Limited to the collection of water run-off from bunded and non-bunded areas and discharge to sewer at point S1
AR5	-	Baling of cardboard and plastic packaging. Briquetting of polystyrene packaging.	From receipt of waste to despatch from site. Limited to packaging from the waste electrical equipment received on site.
AR6	<p>Repackaging of non-hazardous waste.</p> <p>R12 Exchange of waste for submission to any of the operations numbered R1 to R11 (repackaging)</p> <p>D14 Repackaging prior to submission to any of the operations numbered D1 to D13</p>		<p>Repackaging is limited to:</p> <ul style="list-style-type: none"> • taking a waste package (for example a bag, jar, drum or box) out of one cart or bulk container (for example a skip) and placing it into another cart or bulk container (for example, a skip) • taking a waste package from a cart or bulk container (for example, skip) and placing it onto a pallet or vehicle • taking a waste package from a pallet and placing it into a cart or bulk container (for example, skip) • transferring, removing or separating waste from its primary packaging (for example container, bags, bins, boxes). <p>Healthcare waste shall not be transferred, removed or separated from its original packaging.</p> <p>Wastes that are combined together during repackaging activities shall have the same EWC code and similar chemical composition.</p> <p>The repackaging of wastes shall not result in:</p> <ul style="list-style-type: none"> • any incompatible wastes being repackaged together in the same container • a reaction of repackaged wastes with each other • a reaction with the container in which the wastes are being placed <p>Repackaging shall take place undercover or in a building, on impermeable surfacing with sealed drainage.</p> <p>Fugitive emissions shall be minimised during repackaging.</p>

		<p>Repackaging of waste shall not change either the maximum storage times for waste on site or the amount that can be stored at any one time.</p> <p>No waste types shall be submitted to this activity other than those non-hazardous wastes specified in Schedule 2, Table S2.5.</p> <p>Baling of cardboard and plastic packaging from waste electrical equipment received on-site.</p> <p>Briquetting of polystyrene packaging from waste electrical equipment received on-site.</p>
AR7	<p>Storage of non-hazardous waste</p> <p>R13: Storage of waste pending recovery</p> <p>D15 Storage of waste pending disposal</p>	<p>From receipt and storage of non-hazardous waste on site to its repackaging on site; or its transfer off-site.</p> <p>The amount of non-hazardous waste stored on site at any one time shall not exceed 400 tonnes.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p> <p>Aerosol canisters shall be securely stored under cover in well-ventilated containers, and within a caged storage area. Up to 16 cubic metres of aerosol containers shall only be stored for up to 3 months</p> <p>All other wastes shall be stored on site for no longer than 6 months.</p> <p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those non-hazardous wastes specified in Schedule 2, Table S2.5.</p>

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application (Reference FP3235SY)	The response to question B2.1, given in pages 1-15 of the Application. The response to question B2.2, given in pages 15-21 of the Application. The response to question B2.10, given in pages 35-44 of the Application.	21/05/05
Response to request for information in schedule 4 notice dated 23/05/05	All parts of the response.	09/06/05
Variation application EPR/KP3937DU/V002	Response to question 3a (technical standards) in the part C3 application form. Appendix 11 (Emissions monitoring). Appendix 12 Emissions (sampling locations).	07/03/18
Response to request for information dated 17/10/18	Response to question 1 - Avon PF1 Site overview process flow chart 30.10.18 v1.	02/11/18
Response to schedule 5 notice dated 03/12/18	Response to questions: 1b. Procedures: <ul style="list-style-type: none"> • SSOW G013 Pacifying amine drums • SSOW G032 Treating pesticide drums 7. Appendix 14 – revised response to Appendix 6 of the Part C3 application form (incinerator information).	07/02/19
Response to request for information dated 06/03/19	<ul style="list-style-type: none"> • SSOW96 Drum draining, off-line crushing area. Avonmouth Management System PKC-AVNMS-001 Mar 2019.	20/03/19
Response to request for information dated 04/04/19	<ul style="list-style-type: none"> • Procedure SSOW A117 Packcare Avonmouth Draining Bulking. • Procedure SOP-GP-ENV-2AV Avonmouth Waste Acceptance. App 5 Fire Prevention Plan Avonmouth 12.04.19.	17/04/19
Variation application EPR/KP3937DU/V003	Avonmouth Site Storage Layout, dated 09/08/19	15/08/19
Response to Schedule 5 notice dated 03/12/18	Avonmouth Management System PKC-AVNMS-001 dated 19/12/19, V9	30/12/19
Healthcare waste: appropriate measures for permitted facilities Version published 13 July 2020	All parts of the appropriate measures guidance shall apply to activities AR3, AR6 and AR7	-
Non-hazardous and inert waste: appropriate measures for permitted facilities Version published 12 July 2021	All parts of the appropriate measures guidance shall apply for activities AR6 and AR7.	-

Table S1.2 Operating techniques		
Description	Parts	Date Received
Chemical waste: appropriate measures for permitted facilities Version published 18 November 2020	All parts of the appropriate measures guidance shall apply other than those parts to which an improvement programme requirement applies in Table S1.3 (and only until the date that the improvement has been or must be met, whichever is the earlier).	-
Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities Version published 13 July 2022	Following completion of PO1 all parts of the appropriate measures guidance shall apply.	-
Response to regulation 61 notice	Operating techniques as set out in the response to the regulation 61 notice.	13/01/23

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The operator shall perform a study to determine the extent to which the operation of the systems in place at the plant to minimise NOx emissions (including the NOx abatement installed to meet the new emission limit value for NOx of 180 mg/m³ as a daily average) can be optimised. A written report of the study shall be submitted to the Environment Agency for approval which shall include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> • A brief description of the measures installed measures at the installation to minimise NOx emissions, including details of how the reagent dosing system responds to emissions monitoring. • The results the optimisation study including: <ul style="list-style-type: none"> ○ a description of the parameters that were varied during the optimisation e.g. ammonia or urea feed rates, physical form of urea injected, air flows, and the range over which they were varied ○ the levels of NOx achieved and associated levels of ammonia and nitrous oxide emissions and reagent consumption ○ observed effects and predicted long-term impacts on plant operation, reliability and maintenance regime ○ any changes to the composition of the bottom ash and boiler ash and the implications of those changes for the ability to process and use the ash, as well as for the pollution potential of the ash both during processing and its subsequent use as a secondary aggregate (if relevant) ○ any other relevant cross-media effects 	20/11/24

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> ○ a description of how the plant will be operated on an ongoing basis to minimise NOx emissions, including target emission limit values for NOx and NH₃ 	
IC2	The operator shall submit a report to the Environment Agency for approval on whether dioxin emissions to air are stable. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic dioxin emissions monitoring data and have regard to the Environment Agency Dioxins Monitoring Protocol.	31/12/23
IC3	<p>The operator shall review and update their procedures to ensure that they meet the requirements of technical guidance Chemical waste: appropriate measures for permitted facilities. Specifically, they must demonstrate that the following appropriate measure(s) of the guidance will be met:</p> <ul style="list-style-type: none"> • Section 2.3 Accident Management plan • Section 2.6 Plant decommissioning • Section 3.1 Point 7 Control of Major Accident Hazards (COMAH) requirements • Section 3.3 Waste Tracking • Section 4 Point 13 Leak detection • Section 4 Point 15 Maximum storage time • Section 4 Point 22 Size of inspection gap • Section 4 Points 71 to 77 Aerosol storage • Section 4 Points 80 to 89 Bulking <p>A copy of the updated procedure(s) shall be submitted to the Environment Agency for approval.</p>	03/12/2023
IC4	<p>The operator shall review plant operation and emissions monitoring data over at least the previous 12 months to establish how daily average emissions should be determined. The operator shall a report to the Environment Agency for approval that summarises the review and include but not necessarily be limited to:</p> <ul style="list-style-type: none"> • The number of days on which the plant did not operate for a complete 24 hours • Where the plant did not operate for 24 hours the number of hours that it did operate for and the number of hours where emissions were considered to be stable taking into account start-up and shut-down definitions. • A proposal for the number of half hourly averages or 10 minute averages that are required for a daily average value to be valid 	20/05/25

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	Acceptance of WEEE	No WEEE shall be accepted under this permit until standard rules permit EPR/EB3100KW has been surrendered and the operator has received written confirmation from the Environment Agency that WEEE can be accepted.
2	Acceptance of combustible waste under Activity reference AR6	<p>No non-hazardous combustible waste shall be accepted for transfer and storage until:</p> <ul style="list-style-type: none"> • The fire detection system specified in section 8.4 of the Fire Prevention Plan has been installed; • A commissioning plan has been submitted to the Environment Agency that includes confirmation that the fire detection system has been installed; • An updated Fire Prevention Plan has been submitted for approval that includes details of the fire detection system including the location of the monitors and details of the operation and maintenance of the equipment; and <p>The Environment Agency has confirmed in writing that combustible wastes can be accepted for transfer and storage.</p>

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel Oil	< 0.1% sulphur content

Table S2.2 Permitted waste types and quantities for incineration plant (Activity reference AR1)	
Maximum quantity	9,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application
Waste code	Description
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 04	metallic packaging
15 01 10*	packaging containing residues of or contaminated by hazardous substances

Table S2.3 Permitted waste types and quantities for re-packaging (activity reference AR2)	
Maximum quantity	24,999 total for activities referenced AR2, AR6 and AR7
06	Wastes from inorganic chemical processes
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
06 02	wastes from the MFSU of bases
06 02 01*	calcium hydroxide
06 02 03*	ammonium hydroxide
06 02 04*	sodium and potassium hydroxide
06 02 05*	other bases
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
08 01	wastes from MFSU and removal of paint and varnish

Table S2.3 Permitted waste types and quantities for re-packaging (activity reference AR2)	
Maximum quantity	24,999 total for activities referenced AR2, AR6 and AR7
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
08 01 13*	sludges from paint or varnish containing organic solvents or other hazardous substances
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances
08 01 17*	wastes from paint or varnish removal containing organic solvents or other hazardous substances
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
08 01 21*	waste paint or varnish remover
08 03	wastes from MFSU of printing inks
08 03 12*	waste ink containing hazardous substances
08 03 14*	ink sludges containing hazardous substances
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing hazardous substances
08 04	wastes from MFSU of adhesives and sealants (including water proofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 11*	adhesive and sealant sludges containing organic solvents or other hazardous substances
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other hazardous substances
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances
08 05	wastes not otherwise specified in 08
08 05 01*	waste isocyanates
09	Wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)
13 01	waste hydraulic oils
13 01 04*	chlorinated emulsions

Table S2.3 Permitted waste types and quantities for re-packaging (activity reference AR2)	
Maximum quantity	24,999 total for activities referenced AR2, AR6 and AR7
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
13 02	waste engine, gear and lubricating oils
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
13 03	waste insulating and heat transmission oils
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 07*	oil filters
16 01 08*	components containing mercury
16 01 14*	antifreeze fluids containing hazardous substances
16 02	wastes from electrical and electronic equipment
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 15*	hazardous components removed from discarded equipment
16 03	off-specification batches and unused products
16 03 03*	inorganic wastes containing hazardous substances
16 03 05*	organic wastes containing hazardous substances

Table S2.3 Permitted waste types and quantities for re-packaging (activity reference AR2)	
Maximum quantity	24,999 total for activities referenced AR2, AR6 and AR7
16 05	gases in pressure containers and discarded chemicals
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing hazardous substances
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances
16 06	batteries and accumulators
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 06*	separately collected electrolyte from batteries and accumulators
16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing hazardous substances
16 10 03*	aqueous concentrates containing hazardous substances
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
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 06*	wood containing hazardous substances
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
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

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 04*	acid-generating tailings from processing of sulphide ore

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
01 03 05*	other tailings containing hazardous substances
01 03 07*	other wastes containing hazardous substances from physical and chemical processing of metalliferous minerals
01 03 10*	red mud from alumina production containing hazardous substances other than the wastes mentioned in 01 03 07
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 07*	wastes containing hazardous substances from physical and chemical processing of non-metalliferous minerals
01 05	drilling muds and other drilling wastes
01 05 05*	oil-containing drilling muds and wastes
01 05 06*	drilling muds and other drilling wastes containing hazardous substances
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 08*	agrochemical waste containing hazardous substances
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing hazardous substances
03 02	wastes from wood preservation
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organochlorinated wood preservatives
03 02 03*	organometallic wood preservatives
03 02 04*	inorganic wood preservatives
03 02 05*	other wood preservatives containing hazardous substances
04	Wastes from the leather, fur and textile industries
04 02	wastes from the textile industry
04 02 14*	wastes from finishing containing organic solvents
04 02 16*	dyestuffs and pigments containing hazardous substances
04 02 19*	sludges from on-site effluent treatment containing hazardous substances
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 02*	desalter sludges
05 01 03*	tank bottom sludges
05 01 04*	acid alkyl sludges
05 01 05*	oil spills
05 01 06*	oily sludges from maintenance operations of the plant or equipment
05 01 07*	acid tars

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
05 01 08*	other tars
05 01 09*	sludges from on-site effluent treatment containing hazardous substances
05 01 11*	wastes from cleaning of fuels with bases
05 01 12*	oil containing acids
05 01 15*	spent filter clays
05 06	wastes from the pyrolytic treatment of coal
05 06 01*	acid tars
05 06 03*	other tars
05 07	wastes from natural gas purification and transportation
05 07 01*	wastes containing mercury
06	Wastes from inorganic chemical processes
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 03*	hydrofluoric acid
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
06 02	wastes from the MFSU of bases
06 02 01*	calcium hydroxide
06 02 03*	ammonium hydroxide
06 02 04*	sodium and potassium hydroxide
06 02 05*	other bases
06 03	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 11*	solid salts and solutions containing cyanides
06 03 13*	solid salts and solutions containing heavy metals
06 03 15*	metallic oxides containing heavy metals
06 04	metal-containing wastes other than those mentioned in 06 03
06 04 03*	wastes containing arsenic
06 04 04*	wastes containing mercury
06 04 05*	wastes containing other heavy metals
06 05	sludges from on-site effluent treatment
06 05 02*	sludges from on-site effluent treatment containing hazardous substances
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes
06 06 02*	wastes containing hazardous sulphides
06 07	wastes from the MFSU of halogens and halogen chemical processes
06 07 02*	activated carbon from chlorine production

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
06 07 03*	barium sulphate sludge containing mercury
06 07 04*	solutions and acids, for example contact acid
06 08	wastes from the MFSU of silicon and silicon derivatives
06 08 02*	waste containing hazardous chlorosilanes
06 09	wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes
06 09 03*	calcium-based reaction wastes containing or contaminated with hazardous substances
06 10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 02*	wastes containing hazardous substances
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides
06 13 02*	spent activated carbon (except 06 07 02)
06 13 04*	wastes from asbestos processing
06 13 05*	soot
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 07*	halogenated still bottoms and reaction residues
07 01 08*	other still bottoms and reaction residues
07 01 09*	halogenated filter cakes and spent absorbents
07 01 10*	other filter cakes and spent absorbents
07 01 11*	sludges from on-site effluent treatment containing hazardous substances
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 01*	aqueous washing liquids and mother liquors
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 07*	halogenated still bottoms and reaction residues
07 02 08*	other still bottoms and reaction residues
07 02 09*	halogenated filter cakes and spent absorbents
07 02 10*	other filter cakes and spent absorbents
07 02 11*	sludges from on-site effluent treatment containing hazardous substances
07 02 14*	wastes from additives containing hazardous substances
07 02 16*	waste containing hazardous silicones
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
07 03 01*	aqueous washing liquids and mother liquors
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 07*	halogenated still bottoms and reaction residues
07 03 08*	other still bottoms and reaction residues
07 03 09*	halogenated filter cakes and spent absorbents
07 03 10*	other filter cakes and spent absorbents
07 03 11*	sludges from on-site effluent treatment containing hazardous substances
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 01*	aqueous washing liquids and mother liquors
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 07*	halogenated still bottoms and reaction residues
07 04 08*	other still bottoms and reaction residues
07 04 09*	halogenated filter cakes and spent absorbents
07 04 10*	other filter cakes and spent absorbents
07 04 11*	sludges from on-site effluent treatment containing hazardous substances
07 04 13*	solid wastes containing hazardous substances
07 05	wastes from the MFSU of pharmaceuticals
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 07*	halogenated still bottoms and reaction residues
07 05 08*	other still bottoms and reaction residues
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 11*	sludges from on-site effluent treatment containing hazardous substances
07 05 13*	solid wastes containing hazardous substances
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01*	aqueous washing liquids and mother liquors
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 07*	halogenated still bottoms and reaction residues
07 06 08*	other still bottoms and reaction residues
07 06 09*	halogenated filter cakes and spent absorbents
07 06 10*	other filter cakes and spent absorbents
07 06 11*	sludges from on-site effluent treatment containing hazardous substances

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 01*	aqueous washing liquids and mother liquors
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 07*	halogenated still bottoms and reaction residues
07 07 08*	other still bottoms and reaction residues
07 07 09*	halogenated filter cakes and spent absorbents
07 07 10*	other filter cakes and spent absorbents
07 07 11*	sludges from on-site effluent treatment containing hazardous substances
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
08 01	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
08 01 13*	sludges from paint or varnish containing organic solvents or other hazardous substances
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances
08 01 17*	wastes from paint or varnish removal containing organic solvents or other hazardous substances
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
08 01 21*	waste paint or varnish remover
08 03	wastes from MFSU of printing inks
08 03 12*	waste ink containing hazardous substances
08 03 14*	ink sludges containing hazardous substances
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing hazardous substances
08 04	wastes from MFSU of adhesives and sealants (including water proofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 11*	adhesive and sealant sludges containing organic solvents or other hazardous substances
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other hazardous substances
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances
08 05	wastes not otherwise specified in 08
08 05 01*	waste isocyanates
09	Wastes from the photographic industry

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
09 01	wastes from the photographic industry
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)
10 01 04*	oil fly ash and boiler dust
10 01 09*	sulphuric acid
10 01 13*	fly ash from emulsified hydrocarbons used as fuel
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing hazardous substances
10 01 16*	fly ash from co-incineration containing hazardous substances
10 01 18*	wastes from gas cleaning containing hazardous substances
10 01 20*	sludges from on-site effluent treatment containing hazardous substances
10 01 22*	aqueous sludges from boiler cleansing containing hazardous substances
10 02	wastes from the iron and steel industry
10 02 07*	solid wastes from gas treatment containing hazardous substances
10 02 11*	wastes from cooling-water treatment containing oil
10 02 13*	sludges and filter cakes from gas treatment containing hazardous substances
10 03	wastes from aluminium thermal metallurgy
10 03 04*	primary production slags
10 03 08*	salt slags from secondary production
10 03 09*	black drosses from secondary production
10 03 17*	tar-containing wastes from anode manufacture
10 03 19*	flue-gas dust containing hazardous substances
10 03 21*	other particulates and dust (including ball-mill dust) containing hazardous substances
10 03 23*	solid wastes from gas treatment containing hazardous substances
10 03 25*	sludges and filter cakes from gas treatment containing hazardous substances
10 03 27*	wastes from cooling-water treatment containing oil
10 03 29*	wastes from treatment of salt slags and black drosses containing hazardous substances
10 04	wastes from lead thermal metallurgy

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
10 04 01*	slags from primary and secondary production
10 04 02*	dross and skimmings from primary and secondary production
10 04 03*	calcium arsenate
10 04 04*	flue-gas dust
10 04 05*	other particulates and dust
10 04 06*	solid wastes from gas treatment
10 04 07*	sludges and filter cakes from gas treatment
10 04 09*	wastes from cooling-water treatment containing oil
10 05	wastes from zinc thermal metallurgy
10 05 03*	flue-gas dust
10 05 05*	solid waste from gas treatment
10 05 06*	sludges and filter cakes from gas treatment
10 05 08*	wastes from cooling-water treatment containing oil
10 06	wastes from copper thermal metallurgy
10 06 03*	flue-gas dust
10 06 06*	solid wastes from gas treatment
10 06 07*	sludges and filter cakes from gas treatment
10 06 09*	wastes from cooling-water treatment containing oil
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 07*	wastes from cooling-water treatment containing oil
10 08	wastes from other non-ferrous thermal metallurgy
10 08 08*	salt slag from primary and secondary production
10 08 12*	tar-containing wastes from anode manufacture
10 08 15*	flue-gas dust containing hazardous substances
10 08 17*	sludges and filter cakes from flue-gas treatment containing hazardous substances
10 08 19*	wastes from cooling-water treatment containing oil
10 09	wastes from casting of ferrous pieces
10 09 05*	casting cores and moulds which have not undergone pouring containing hazardous substances
10 09 07*	casting cores and moulds which have undergone pouring containing hazardous substances
10 09 09*	flue-gas dust containing hazardous substances
10 09 11*	other particulates containing hazardous substances
10 09 13*	waste binders containing hazardous substances
10 09 15*	waste crack-indicating agent containing hazardous substances
10 10	wastes from casting of non-ferrous pieces
10 10 05*	casting cores and moulds which have not undergone pouring, containing hazardous substances

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
10 10 07*	casting cores and moulds which have undergone pouring, containing hazardous substances
10 10 09*	flue-gas dust containing hazardous substances
10 10 11*	other particulates containing hazardous substances
10 10 13*	waste binders containing hazardous substances
10 10 15*	waste crack-indicating agent containing hazardous substances
10 11	wastes from manufacture of glass and glass products
10 11 09*	waste preparation mixture before thermal processing, containing hazardous substances
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 13*	glass-polishing and -grinding sludge containing hazardous substances
10 11 15*	solid wastes from flue-gas treatment containing hazardous substances
10 11 17*	sludges and filter cakes from flue-gas treatment containing hazardous substances
10 11 19*	solid wastes from on-site effluent treatment containing hazardous substances
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 09*	solid wastes from gas treatment containing hazardous substances
10 12 11*	wastes from glazing containing heavy metals
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 12*	solid wastes from gas treatment containing hazardous substances
10 14	waste from crematoria
10 14 01*	waste from gas cleaning containing mercury
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	phosphatising sludges
11 01 09*	sludges and filter cakes containing hazardous substances
11 01 11*	aqueous rinsing liquids containing hazardous substances
11 01 13*	degreasing wastes containing hazardous substances
11 01 15*	eluate and sludges from membrane systems or ion exchange systems containing hazardous substances
11 01 16*	saturated or spent ion exchange resins
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 02*	sludges from zinc hydrometallurgy (including jarosite, goethite)

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
11 02 05*	wastes from copper hydrometallurgical processes containing hazardous substances
11 02 07*	other wastes containing hazardous substances
11 03	sludges and solids from tempering processes
11 03 01*	wastes containing cyanide
11 03 02*	other wastes
11 05	wastes from hot galvanising processes
11 05 03*	solid wastes from gas treatment
11 05 04*	spent flux
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)
12 01 08*	machining emulsions and solutions containing halogens
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 12*	spent waxes and fats
12 01 14*	machining sludges containing hazardous substances
12 01 16*	waste blasting material containing hazardous substances
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
12 01 19*	readily biodegradable machining oil
12 01 20*	spent grinding bodies and grinding materials containing hazardous substances
12 03	wastes from water and steam degreasing processes (except 11)
12 03 01*	aqueous washing liquids
12 03 02*	steam degreasing wastes
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)
13 01	waste hydraulic oils
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
13 02	waste engine, gear and lubricating oils
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
13 03	waste insulating and heat transmission oils
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
13 04	bilge oils
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
13 05	oil/water separator contents
13 05 01*	solids from grit chambers and oil/water separators
13 05 02*	sludges from oil/water separators
13 05 03*	interceptor sludges
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
13 05 08*	mixtures of wastes from grit chambers and oil/water separators
13 07	wastes of liquid fuels
13 07 01*	fuel oil and diesel
13 07 02*	petrol
13 07 03*	other fuels (including mixtures)
13 08	oil wastes not otherwise specified
13 08 01*	desalter sludges or emulsions
13 08 02*	other emulsions
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)
14 06	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 01*	chlorofluorocarbons, HCFC, HFC
14 06 02*	other halogenated solvents and solvent mixtures
14 06 03*	other solvents and solvent mixtures
14 06 04*	sludges or solid wastes containing halogenated solvents
14 06 05*	sludges or solid wastes containing other solvents
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
16	Wastes not otherwise specified in the list
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 07*	oil filters
16 01 08*	components containing mercury
16 01 13*	brake fluids
16 01 14*	antifreeze fluids containing hazardous substances
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 02	wastes from electrical and electronic equipment
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 15*	hazardous components removed from discarded equipment
16 03	off-specification batches and unused products
16 03 03*	inorganic wastes containing hazardous substances
16 03 05*	organic wastes containing hazardous substances
16 05	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing hazardous substances
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances
16 06	batteries and accumulators
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 06*	separately collected electrolyte from batteries and accumulators
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 08*	wastes containing oil
16 07 09*	wastes containing other hazardous substances
16 08	spent catalysts
16 08 02*	spent catalysts containing hazardous transition metals or hazardous transition metal compounds

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent liquids used as catalysts
16 08 07*	spent catalysts contaminated with hazardous substances
16 09	oxidising substances
16 09 01*	permanganates, for example potassium permanganate
16 09 02*	chromates, for example potassium chromate, potassium or sodium dichromate
16 09 03*	peroxides, for example hydrogen peroxide
16 09 04*	oxidising substances, not otherwise specified
16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing hazardous substances
16 10 03*	aqueous concentrates containing hazardous substances
16 11	waste linings and refractories
16 11 01*	carbon-based linings and refractories from metallurgical processes containing hazardous substances
16 11 03*	other linings and refractories from metallurgical processes containing hazardous substances
16 11 05*	linings and refractories from non-metallurgical processes containing hazardous substances
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances
17 02	wood, glass and plastic
17 02 04*	glass, plastic and wood containing or contaminated with hazardous substances
17 03	bituminous mixtures, coal tar and tarred products
17 03 01*	bituminous mixtures containing coal tar
17 03 03*	coal tar and tarred products
17 04	metals (including their alloys)
17 04 09*	metal waste contaminated with hazardous substances
17 04 10*	cables containing oil, coal tar and other hazardous substances
17 06	insulation materials and asbestos-containing construction materials
17 06 03*	other insulation materials consisting of or containing hazardous substances
17 08	gypsum-based construction material
17 08 01*	gypsum-based construction materials contaminated with hazardous substances
17 09	other construction and demolition wastes
17 09 01*	construction and demolition wastes containing mercury
17 09 03*	other construction and demolition wastes (including mixed wastes) containing hazardous substances

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 06*	chemicals consisting of or containing hazardous substances
18 01 10*	amalgam waste from dental care
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 05*	chemicals consisting of or containing hazardous substances
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
19 01	wastes from incineration or pyrolysis of waste
19 01 05*	filter cake from gas treatment
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 07*	solid wastes from gas treatment
19 01 10*	spent activated carbon from flue-gas treatment
19 01 11*	bottom ash and slag containing hazardous substances
19 01 13*	fly ash containing hazardous substances
19 01 15*	boiler dust containing hazardous substances
19 01 17*	pyrolysis wastes containing hazardous substances
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing hazardous substances
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing hazardous substances
19 02 09*	solid combustible wastes containing hazardous substances
19 02 11*	other wastes containing hazardous substances
19 03	stabilised/solidified wastes
19 03 04*	wastes marked as hazardous, partly stabilised other than 19 03 08
19 03 06*	wastes marked as hazardous, solidified
19 04	vitrified waste and wastes from vitrification
19 04 02*	fly ash and other flue-gas treatment wastes
19 04 03*	non-vitrified solid phase
19 07	landfill leachate
19 07 02*	landfill leachate containing hazardous substances
19 08	wastes from waste water treatment plants not otherwise specified
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
19 08 08*	membrane system waste containing heavy metals
19 08 10*	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
19 08 11*	sludges containing hazardous substances from biological treatment of industrial waste water
19 08 13*	sludges containing hazardous substances from other treatment of industrial waste water
19 10	wastes from shredding of metal-containing wastes
19 10 05*	other fractions containing hazardous substances
19 11	wastes from oil regeneration
19 11 01*	spent filter clays
19 11 02*	acid tars
19 11 03*	aqueous liquid wastes
19 11 04*	wastes from cleaning of fuel with bases
19 11 05*	sludges from on-site effluent treatment containing hazardous substances
19 11 07*	wastes from flue-gas cleaning
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 06*	wood containing hazardous substances
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing hazardous substances
19 13 03*	sludges from soil remediation containing hazardous substances
19 13 05*	sludges from groundwater remediation containing hazardous substances
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing hazardous substances
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 29*	detergents containing hazardous substances

Table S2.4 Permitted waste types and quantities for storage (activity reference AR3)	
Maximum quantity	600 tonnes at any one time
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

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 10
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 01 04	waste plastics (except packaging)
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 02	wastes from preserving agents

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper recycling
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 09	lime mud waste
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	Wastes from the leather, fur and textile industries
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 01 13	boiler feedwater sludges
05 01 14	wastes from cooling columns
05 01 16	sulphur-containing wastes from petroleum desulphurisation
05 01 17	bitumen
05 06	wastes from the pyrolytic treatment of coal
05 06 04	waste from cooling columns
05 07	wastes from natural gas purification and transportation
05 07 02	wastes containing sulphur
06	Wastes from inorganic chemical processes
06 03	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 16	metallic oxides other than those mentioned in 06 03 15
06 05	sludges from on-site effluent treatment
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
06 09	wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	wastes from the manufacture of inorganic pigments and opacifiers
06 11 01	calcium-based reaction wastes from titanium dioxide production
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 03	carbon black
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 13	waste plastic

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 05	wastes from the MFSU of pharmaceuticals
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 14	solid wastes other than those mentioned in 07 05 13
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
08 01	wastes from MFSU and removal of paint and varnish
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 02	wastes from MFSU of other coatings (including ceramic materials)
08 02 01	waste coating powders
08 02 02	aqueous sludges containing ceramic materials
08 02 03	aqueous suspensions containing ceramic materials
08 03	wastes from MFSU of printing inks
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 15	ink sludges other than those mentioned in 08 03 14
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 04	wastes from MFSU of adhesives and sealants (including water proofing products)
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
09	Wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 24	sands from fluidised beds
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 04	wastes from lead thermal metallurgy
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 04	other particulates and dust
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 04	other particulates and dust
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	wastes from other non-ferrous thermal metallurgy
10 08 04	particulates and dust
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	wastes from casting of ferrous pieces

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 05	wastes from hot galvanising processes
11 05 01	hard zinc
11 05 02	zinc ash
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	Wastes not otherwise specified in the list
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 03	end-of-life tyres
16 01 12	brake pads other than those mentioned in 16 01 11
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
16 01 16	tanks for liquefied gas
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
16 01 22	components not otherwise specified
16 02	wastes from electrical and electronic equipment
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
16 03	off-specification batches and unused products
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
16 05	gases in pressure containers and discarded chemicals
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
16 06	batteries and accumulators
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 08	spent catalysts
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
16 11	waste linings and refractories
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	metals (including their alloys)
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
17 06	insulation materials and asbestos-containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 08	gypsum-based construction material

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 01	sharps (except 18 01 03)
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 09	medicines other than those mentioned in 18 01 08
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 01	sharps (except 18 02 02)
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 08	medicines other than those mentioned in 18 02 07
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
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 03	stabilised/solidified wastes
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	vitrified waste and wastes from vitrification
19 04 01	vitrified waste
19 04 04	aqueous liquid wastes from vitrified waste tempering
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost
19 06	wastes from anaerobic treatment of waste

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)

Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 07	landfill leachate
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	wastes from waste water treatment plants not otherwise specified
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
19 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 06	other fractions other than those mentioned in 19 10 05
19 11	wastes from oil regeneration
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)

Table S2.5 Permitted waste types and quantities for non-hazardous waste transfer station (Activity references AR6 and AR7)	
Maximum quantity	24,999 tonnes per year total for activity references AR2, AR6 and AR7
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	medicines other than those mentioned in 20 01 31
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
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 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Particulate matter	Incineration exhausts gases	10 mg/m ³	98% of all ½-hr averages over a calendar year	Continuous	EN 14181
	Particulate matter		10 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			5 mg/m ³ from 03/12/2023			
	Total Organic Carbon (TOC)		10 mg/m ³	98% of all ½-hr averages over a calendar year	Continuous	EN 14181
	Total Organic Carbon (TOC)		10 mg/m ³	daily average	Continuous	EN 14181
	Hydrogen chloride		10 mg/m ³	98% of all ½-hr averages over a calendar year	Continuous	EN 14181
	Hydrogen chloride		10 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			8 mg/m ³ from 03/12/2023			

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Hydrogen fluoride	Incineration exhausts gases	2 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	CEN TS 17340
			1 mg/m ³ from 03/12/2023			
	Carbon monoxide		100 mg/m ³	½-hr average	Continuous	EN 14181
	Carbon monoxide		50 mg/m ³	daily average	Continuous	EN 14181
	Sulphur dioxide		50 mg/m ³	98% of all ½-hr averages over a calendar year	Continuous	EN 14181
	Sulphur dioxide		50 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			40 mg/m ³ from 03/12/2023			
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)		400 mg/m ³	½-hr average	Continuous	EN 14181
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)		400 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
180 mg/m ³ from 03/12/2023						

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Cadmium & thallium and their compounds (total)	Incineration exhausts gases	0.05 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.02 mg/m ³ from 03/12/2023			
	Mercury and its compounds		0.05 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually until 02/12/2023	BS EN 13211
	Mercury and its compounds		0.02 mg/m ³ from 03/12/2023	Daily average	Continuous from 03/12/2023	EN 14181
	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)		0.5 mg/m ³ Until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.3 mg/m ³ from 03/12/2023			
	Exhaust gas temperature		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas pressure		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas flow		No limit set	-	Continuous from	BS EN 16911-2
	Exhaust gas oxygen content		No limit set	-	Continuous	EN 14181

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Exhaust gas water vapour content	Incineration exhausts gases	No limit set	-	Continuous	EN 14181
	Ammonia		15 mg/m ³ from 03/12/2023 limit does not apply where SNCR is not installed	daily average	Continuous from 03/12/2023 monitoring is not required where SNCR is not installed	EN 14181
	Nitrous oxide (N ₂ O)		No limit set	½-hr average and daily average from	Continuous from monitoring is not required where SNCR is not installed	EN 14181
	Carbon dioxide		No limit set	Continuous	Continuous from	EN 14181
	Dioxins / furans (I-TEQ)		0.1 ng/m ³ Until 02/12/2023	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually until 02/12/2023	BS EN 1948 Parts 1, 2 and 3

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Dioxins / furans (I-TEQ)	Incineration exhausts gases	0.06 ng/m ³ from 03/12/2023	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually from 03/12/2023	EN 1948 Parts 1, 2 and 3
			and	and	and	and
			0.08 ng/m ³ if long term limit is specified by the Environment Agency in line with sampling protocol from 03/12/2023	value over sampling period of 2 to 4 weeks for long term sampling	long term sampling if specified by the Environment Agency in line with sampling protocol from 03/12/2023	CEN TS 1948-5 if specified by the Environment Agency in line with sampling protocol
	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	EN 1948 Parts 1, 2 and 4

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	Monitoring standard(s) or method(s)
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Dioxins / furans (WHO-TEQ Humans / Mammals, Fish, Birds)	Incineration exhausts gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	BS EN 1948 Parts 1, 2 and 3
	Polybrominated dibenzodioxins and furans		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	Method based on procedural requirements of EN 1948
	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Annually	BS ISO 11338 Parts 1 and 2.
A2 (shown on Avonmouth site storage layout plan dated 12/04/19)	Particulate matter	Shot blaster and drum crusher	30 mg/m ³	Average of three consecutive measurements of at least 30 minutes each	Annually	BS EN 13284-1, or alternative method as agreed with the Environment Agency

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 (shown on Avonmouth site storage layout plan dated 12/04/19)	Particulate matter	Incineration exhausts gases	150 mg/m ³	½-hr average	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor
	Total Organic Carbon (TOC)		10 mg/m ³	98% of all ½-hr averages over a calendar year	Continuous	
	Carbon monoxide		100 mg/m ³	½-hr average	Continuous	

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	Monitoring frequency	Monitoring standard or method
S1 (shown on AvonDr 1: Drainage plan Sept 2018)	Effluent treatment plant	No parameters specified	No limits set	-	-	-

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As identified in the Application	Wind Speed and Direction	Continuous	Anemometer	
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.

Table S3.4 Residue quality					
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
Bottom Ash	TOC or otherwise as agreed in writing with the Environment Agency	3% or otherwise as agreed in writing with the Environment Agency	Quarterly	EN 14899 and either EN 13137 or EN 15936 or otherwise as agreed in writing with the Environment Agency	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis' Sample of bottom ash shall be taken from ash residues in drums which have passed through the incinerator (not from the partially combusted residues in the quench pit)
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

Table S3.4 Residue quality					
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

* Or other equivalent standard as agreed in writing with the Environment Agency.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.6.1.	A1	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
TOC or otherwise as agreed in writing with the Environment Agency Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	Bottom Ash	Before use of a new disposal or recycling route	
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	APC Residues	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	APC Residues	Before use of a new disposal or recycling route	

Table S4.2: Annual production/treatment	
Parameter	Units
Drums incinerated	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Annual Report as required by condition 4.2.2	Annually	-
Energy used at the installation	Annually	kWh / tonne of waste incinerated
Bottom Ash residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
Ammonia / Urea consumption	Annually	kg / tonne of waste incinerated
Activated Carbon consumption	Annually	kg / tonne of waste incinerated
Lime consumption	Annually	kg / tonne of waste incinerated
Water consumption	Annually	kg / tonne of waste incinerated
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Annual report required by condition 4.2.2	Annual performance report template	-
Emissions to air until 02/12/2023	Forms A1-A8 or other forms as agreed in writing by the Environment Agency	01/11/05
Emissions to air from 03/12/2023	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	07/11/23
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	07/11/23

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	

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

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

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
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.	

(d) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
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

“abatement equipment” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“abnormal operation” means: any technically unavoidable stoppages, disturbances, or failures of the plant or the measurement devices. Abnormal operation starts as defined in condition 2.3.13 and ends as defined in condition 2.3.14. Abnormal operation is limited to 4 hours for a single occurrence and a total of 60 hours per year per line.

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

“APC residues” means air pollution control residues

“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.

“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.

“BAT conclusions” means Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Waste Incineration

“bi-annually” means twice per year with at least five months between tests;

“bottom ash” means unburnt material in the drums that pass through the furnace;

“building” is a covered structure enclosed on all vertical sides that provides sheltered cover and contains emissions of, for example, noise, particulate matter, odour and litter.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

“Commissioning” means testing of the new incineration plant that involves any operation of the furnace or as agreed with the Environment Agency.

“container” is a receptacle for waste for example bags, bins, boxes, drums, IBCs and blister packs. Wastes may be packaged in more than one receptacle for example a bag in a box.

“D” means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste.

‘Daily average’ emissions value means the average of at least 43 valid half hourly averages or for CO the average of at least 43 valid half hourly averages or 129 valid 10 min averages; or otherwise as agreed in writing with the Environment Agency after completion of IC4

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“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 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.

“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.

“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 (as amended)

“healthcare waste” means waste produced during human or animal healthcare, or related research activities. It covers both clinical and offensive waste. Wastes produced by healthcare in the community, and similar types of waste produced by non-healthcare activities are included, for example:

- cosmetic body piercing and body art
- non-medicinal procedures in the hair and beauty sector
- substance abuse
- crime scene clean-up.

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

“incineration line” means all of the incineration equipment related to a common discharge to air location.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“ISO” means International Standards Organisation.

‘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

“LOI” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

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

“medicines” are “medicinal products” as defined in Regulation 130 of Part VIII of the Medicines Act 1968. Waste medicines (or pharmaceutical waste) include:

- expired, unused, spilt and contaminated medical products that are no longer required and need to be disposed of appropriately;
- discarded items contaminated with medicines such as bottles or boxes with residues, gloves, masks, connecting tubing, syringe bodies and drug vials.
- “mixing of hazardous waste” means mixing hazardous waste as defined by Regulation 18 of the Hazardous Waste (England and Wales) Regulations 2005.

“offensive waste” is waste that:

- is not clinical waste
- contains body fluids, secretions or excretions
- falls within waste codes 18 01 04, 18 02 03 or 20 01 99.

“R” means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste.

“repackaging” is:

- taking a waste package for example a bag, drum or box out of one cart or bulk container for example, skip and placing it into another cart or bulk container for example, skip

- taking a waste package from a cart or bulk container for example, skip and placing it onto a pallet or vehicle
- taking a waste package from a pallet and placing it into a cart or bulk container for example, skip
- transferring, removing or separating waste from its primary packaging into another container
- Wastes that are combined together during repackaging activities shall have the same EWC code and similar chemical composition.

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenz[ah]anthracene, Dibenz[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“PCB” means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

“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.

“sealed container” for the purposes of this permit, means a container which is fully enclosed, weather proof, does not allow any solid or liquid content to escape and is lockable.

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

- no liquid will run off the surface otherwise than via the system
- except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump

“start up” is any period, where the plant has been non-operational, until waste has been fed to the plant in a sufficient quantity to initiate steady-state conditions as described in the application or as agreed in writing with the Environment Agency.

“shut down” is any period where the plant is being returned to a non-operational state as described in the application or as agreed in writing with the Environment Agency.

“TOC” means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

“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

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:

- (a) 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

- (b) 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
- (c) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry
- (d) where hazardous wastes are burned in plant covered by Schedule 13 of Environmental Permitting Regulations and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in condition (c) above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.

TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
		Humans / Mammals	Fish	Birds
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
Non-ortho PCBs			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

“year” means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table 2.2, S2.3, S2.4, S2.5, for those tables, 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

‘PCBs’ means

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

‘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

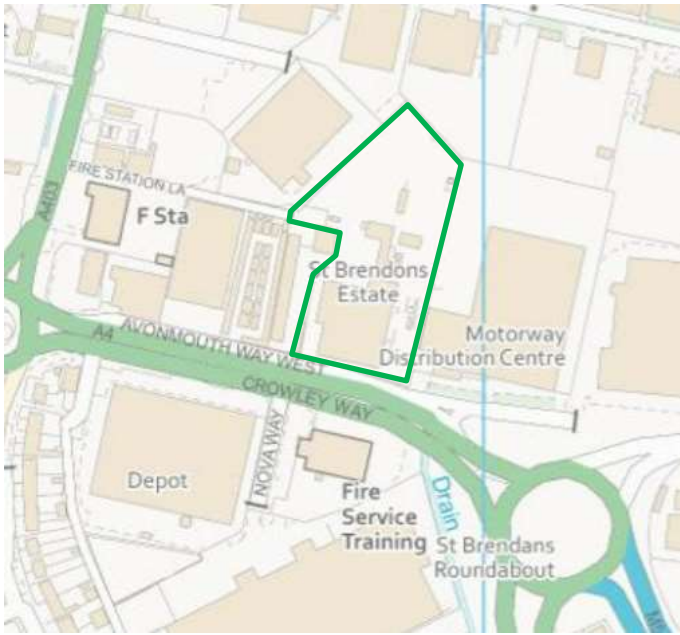
“sharps” means items that could cause cuts or puncture wounds. They include needles, hypodermic needles, scalpels and other blades, knives, infusion sets, saws, broken glass, and nails.

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

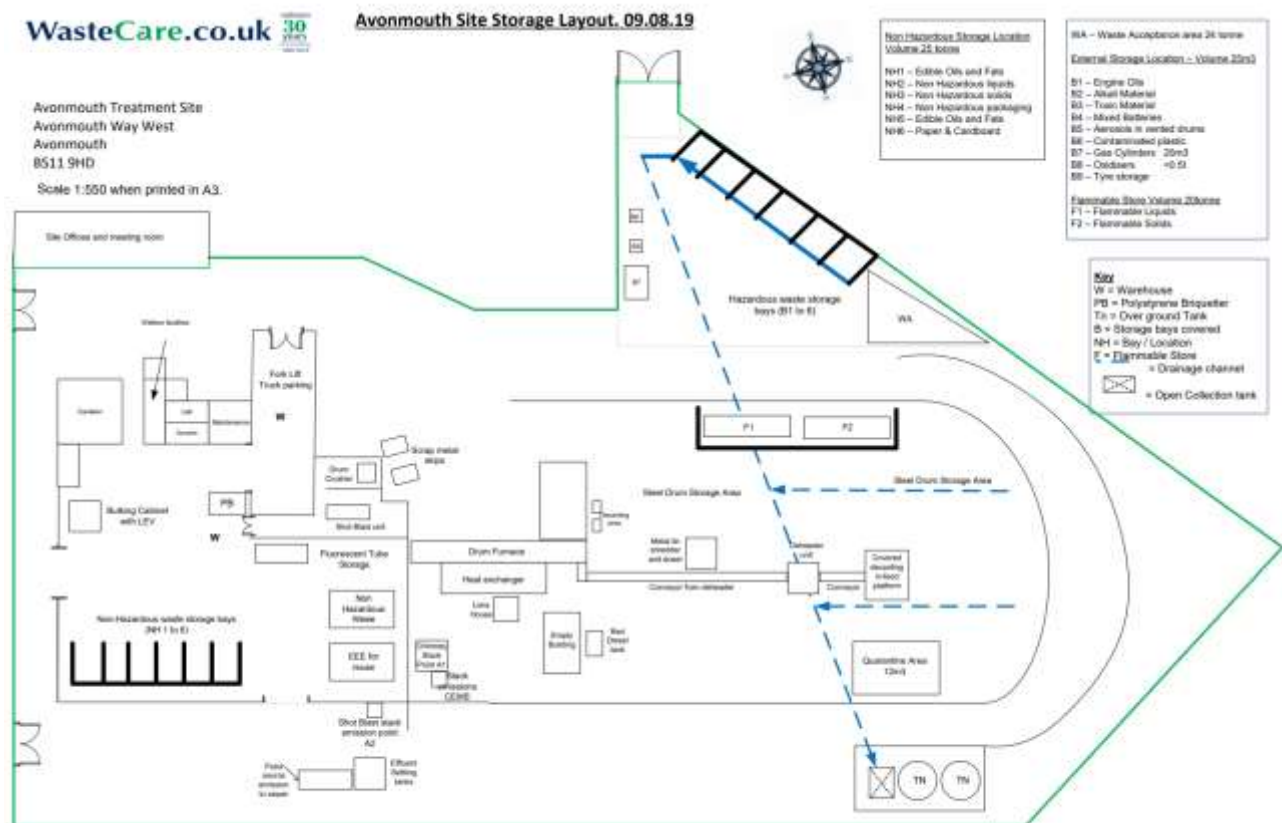
'solidification' means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste

'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



©Crown Copyright. All rights reserved. Environment Agency, 100026380, 2023



END OF PERMIT