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# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Crapper & Sons Landfill Limited

Park Grounds Landfill Brinkworth Road, Wootton Bassett, Swindon, Wiltshire, SN4 8DW

Variation application number

EPR/SP3336SN/V007

Permit number

EPR/SP3336SN

### Park Grounds Landfill Permit number EPR/SP3336SN

#### Introductory note

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

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

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

The purpose of this variation is to make the following changes:

- Increase the amount of waste accepted on site to 60,000 tonnes of non-hazardous waste and 20,000 tonnes of inert waste;
- Extend the existing landfill to generate approximately 250,000 m³ of additional void space in new cells 11 to 15;
- The addition of four new non-hazardous waste codes: 19 01 12, 19 01 14, 19 01 16 and 19 01 18; and
- · Amend leachate level limits.

The schedules specify the changes made to the permit.

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

Status log of the permit				
Description	Date	Comments		
Application SP3336SN (EPR/SP3336SN/A001)	Received 06/05/2005	EPR reference: EPR/SP3336SN/A001.		
Request for additional information dated 18/07/05	19/07/2005	-		
Permit SP3336SN determined (EPR/SP3336SN/A001)	07/04/2006	EPR reference: EPR/SP3336SN.		
Variation determined SP3030MN (EPR/SP3336SN/V002)	28/03/2008	Agency initiated template variation EPR reference: EPR/SP3336SN/V002.		
Variation application EPR/SP3336SN/V003	Received 31/03/2011	To extend landfill to include Cells 7, 8, 9 and 10 Application returned on 14/04/2011.		
Variation application EPR/SP3336SN/V004	Received 20/05/2011	Re-application to extend landfill to include Cells 7, 8, 9 and 10 and increase annual tonnage.		
Variation EPR/SP3336SN/V004 determined	06/12/2011	-		
Environment Agency Landfill Sector Review 2013 / 2014	17/04/2015	Varied and consolidated permit issued in modern condition format.		
Permit reviewed				
Variation determined EPR/SP3336SN/V007				
Permit EPR/SP3336SN				

Status log of the permit			
Description	Date	Comments	
Variation application EPR/SP3336SN/V006	Received 21/7/2016	Application returned 6/10/2016.	
Variation application EPR/SP3336SN/V007	Received 11/10/2018	Variation to extend landfill to include Cells 11, 12, 13, 14 and 15, and increase annual tonnage.	
Variation determined EPR/SP3336SN/V007 Billing reference: RP3235QG	3/7/2020	Varied and consolidated permit issued in modern condition format.	

End of introductory note

#### Notice of variation and consolidation

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

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

#### **Permit number**

EPR/SP3336SN

#### Issued to

Crapper & Sons Landfill Limited ("the operator")

whose registered office is

Park Grounds, Brinkworth Road, Wootton Bassett, Swindon, Wiltshire, SN4 8DW

company registration number 03707005

to operate a regulated facility at

Park Grounds Landfill Brinkworth Road, Wootton Bassett, Swindon, Wiltshire, SN4 8DW

to the extent set out in the schedules.

The notice shall take effect from 03/07/2020

Name	Date
Philip Lamb	03/07/2020

Authorised on behalf of the Environment Agency

#### Schedule 1

The following conditions were varied as a result of the application made by the operator:

1.2.1, 2.5.1, 2.7.6, 3.1.2, 3.3.1, 3.5.1, Table S1.1, Table S1.2, Table S1.3, Table S1.4, Table S1.5, Table S2.1, Table S3.1, Table S3.2, Table S3.3, Table S3.4, Table S3.6, Table S4.1, Table S4.4, Schedule 6 (Interpretation), Schedule 7 (Site Plan).

#### Schedule 2 - consolidated permit

Consolidated permit issued as a separate document.

#### **Permit**

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

#### **Permit number**

#### EPR/SP3336SN

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Crapper & Sons Landfill Limited ("the operator"),

whose registered office is

Park Grounds, Brinkworth Road, Wootton Bassett, Swindon, Wiltshire, SN4 8DW

company registration number 03707005

to operate an installation at

Park Grounds Landfill Brinkworth Road, Wootton Bassett, Swindon, Wiltshire, SN4 8DW

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

Name	Date
Philip Lamb	03/07/2020

Authorised on behalf of the Environment Agency

#### **Conditions**

#### 1 Management

#### 1.1 General management

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

#### 1.2 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 07/04/06 as varied most recently on 03/07/2020 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
  - (a) the costs of setting up and operating the landfill;
  - (b) the costs of the financial provision required by condition 1.2.1; and
  - (c) the estimated costs for the closure and aftercare of the landfill.

#### 1.3 Energy efficiency

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) Implement any appropriate measures identified by a review.

#### 1.4 Efficient use of raw materials

- 1.4.1 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.

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

- 1.5.1 The operator shall:
  - take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
  - (b) review and record at least every four years whether changes to those measures should be made; and
  - (c) 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").

#### 2.2 The site

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

#### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 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.

#### 2.4 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.

#### 2.6 Landfill Engineering

- 2.6.1 No construction of any new cell of the landfill shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.6.2 Where the operator proposes to construct any new cell other than the first cell, but proposes no change from the design of the most recently approved cell which could have any impact on the performance of any element of the design, no construction of the new cell shall commence until the operator has submitted a cell layout drawing and the Environment Agency has confirmed that it is satisfied with the cell layout drawing.
- 2.6.3 The construction of a new cell shall take place only in accordance with the approved construction proposals unless:
  - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
  - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.4 No disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.6.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.6.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
  - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
  - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.7 The operator shall submit a CQA Validation Report within four weeks of the completion of the construction of the relevant landfill infrastructure, or other time period agreed in writing with the Environment Agency.
- 2.6.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.5 and 2.6.6 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.9 For the purposes of conditions 2.6.1, 2.6.2, 2.6.4 and 2.6.5, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
  - (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.
- 2.6.10 Where the Environment Agency has required further information under condition 2.6.9(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
  - (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

#### 2.7 Waste acceptance

- 2.7.1 Wastes shall only be accepted for disposal if:
  - (a) they are listed in schedule 2, table S2.1; and
  - (b) they are non-hazardous waste; and
  - (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400 mm); and
  - (d) they are not shredded used tyres; and
  - (e) they are not liquid waste (including waste waters but excluding sludge); and
  - (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown; and
  - (g) all the relevant waste acceptance procedures have been completed; and
  - (h) they fulfil the relevant waste acceptance criteria; and
  - (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria; and
  - (j) they are wastes which have been treated, except for: inert wastes for which treatment is not technically feasible; or it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment; and
  - (k) they are wastes with a code beginning with 07 05 and 16 03, they shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture.
- 2.7.2 Wastes shall only be accepted for restoration where:
  - (a) they are listed in schedule 2, table S2.2; and
  - (b) they are accepted in accordance with a restoration plan approved in writing by the Environment Agency.
- 2.7.3 The operator shall:
  - (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill and waste at the point of deposit; and
  - (b) be satisfied that the waste conforms to the requirements of condition 2.7.1.
- 2.7.4 Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.7.5 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.7.6 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing Pre-settlement contour plan (ref PreRC-01 dated January 2020).
- 2.7.7 The quantity of waste that is deposited or recovered in the landfill in any year shall not exceed the limits in schedule 1, table S1.5.
- 2.7.8 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

#### 2.8 Leachate levels

2.8.1 The limits for the level of leachate listed in schedule 3, table S3.1 shall not be exceeded.

#### 2.9 Closure and aftercare

2.9.1 The operator shall maintain a closure and aftercare management plan.

#### 2.10 Landfill gas management

- 2.10.1 The operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:
  - (a) collect landfill gas; and
  - (b) control the migration of landfill gas.
- 2.10.2 The operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the operator shall use appropriate measures to flare or treat the gas in accordance with an approved landfill gas management plan.
- 2.10.3 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a revised landfill gas management plan;
  - (b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3 Emissions and monitoring

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

- 3.1.1 The limits in schedule 3 shall not be exceeded.
- 3.1.2 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3, tables S3.2 and S3.3.
- 3.1.3 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.4 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
  - (a) between nine and six months prior to the fourth anniversary of the granting of the permit; and
  - (b) between nine and six months prior to every subsequent six years after the fourth anniversary of the granting of the permit.

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

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

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

#### 3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

#### 3.4 Noise and vibration

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

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:
  - (a) Leachate specified in tables S3.1 and S3.7;
  - (b) Point source emissions specified in tables S3.2 and S3.3;
  - (c) Landfill gas specified in tables S3.4, S3.5 and S3.6;
  - (d) Surface water specified in table S3.8.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 A topographical survey of the site referenced to ordnance datum shall be carried out and shall be used to produce a plan of a scale adequate to show the surveyed features of the site:
  - (a) annually; and
  - (b) prior to the disposal of waste in any new cell or new development area of the landfill; and
  - (c) following closure of the landfill or part of the landfill.

#### 3.6 Pests

- 3.6.1 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.
- 3.6.2 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution hazard or annoyance from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 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) the results of groundwater monitoring;
    - (ii) sub-surface landfill gas monitoring;
    - (iii) leachate levels, quality and quantities;
    - (iv) landfill gas generation and collection;
    - (v) waste types and quantities;
    - (vi) the location of hazardous waste deposits; and
    - (vii) the specification and as built drawings of the basal, sidewall and capping engineering systems.
- 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 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 A report or reports on the performance of the activities over the previous year ('the annual report') shall be submitted to the Environment Agency by 31st January each year or such other date as may be agreed in writing by the Agency, with the exception of 4.2.2(c) that must be provided by the end of February each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto. The review will include written descriptions of the improvements made to operational performance during the year, action plans developed and planned improvements for the coming year;
- (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3;
- (c) the annual production/treatment set out in schedule 4, table S4.2;
- (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
- the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
- (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
- (g) a calculation of the remaining capacity (reported in cubic metres) derived from the presettlement contours and the most recent topographical survey;
- (h) a plan(s) ('the monitoring and extraction point plan MEPP') showing the locations of existing and any new leachate and landfill gas extraction and monitoring points.
- 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) using the forms specified in schedule 4, table S4.4 or other reporting format as agreed in writing with the Environment Agency; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one 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.
- 4.2.5 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.

#### 4.3 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 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 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.
- 4.3.4 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.

#### 4.4 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	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	D5 –Specially engineered landfill	Section 5.2 Part A(1)(a), The disposal of waste in a landfill.	Landfill for non-hazardous waste.	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.6, as an integral part of landfilling.
Directly Ass	sociated Activities			
A2	N/A	-	Recirculation of leachate.	Leachate arising from the landfill.
A3	D6 – release to water body except seas/ oceans	-	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.
A4	D8 – Biological treatment of waste	-	Treatment of landfill gas for disposal in biofilters.	Landfill gas arising from the landfill.

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application	The response to questions 2.1, 2.2, 2.3, 2.4, 2.5 and 2.11 in part B of the Application.	06/05/2005	
Variation application EPR/SP3336SN/V004	Response to question 3a of the Part C3 application form. 20/05/2011		
Response to request for information by schedule 5 notice	Response to questions 1 and 4. 07/10/20		
Variation application EPR/SP3336SN/V007	Response to question 3 of the Part C3 application form.  Excluding:  • Site layout plans showing the new cells 11-15 (order renumbered in later submissions);  • Odour Management Plan (Version 1);  • ESSD Version F1 (July 2018);  • Landfill Gas Risk Assessment Review and Gas Management Plan (June 2018).	11/10/2018	

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Response to Schedule 5 Notice dated 15/02/2019	Response to questions 1 to 18.  Excluding:  • Site layout plans showing the new cells 11-15 (order renumbered in later submissions);  • Drawing number 2437/S5/D3.	02/04/2019 and 18/04/2019	
Response to Schedule 5 Notice dated 10/07/2019	Response to questions 1 to 10.  Excluding:  Odour Management Plan (Version 2).	12/08/2019	
Response to Schedule 5 Notice	Response to questions 1 to 6.	04/11/2019	
dated 04/10/2019	Odour Management Plan (Version 3).	15/05/2020	
Response to follow-up email regarding Schedule 5 Notice response received 04/11/2019	Revised ESSD (ref: 2437/ESSD Final: Version F4 January 2020).  Pre-settlement contour plan (ref PreRC-01 dated January 2020).	10/01/2020	

Table S1.3 Improvement programme requirements			
Reference	Requirement	Date	
1	The operator shall submit a written plan to the Environment Agency for approval. The plan must contain detailed proposals for the management of leachate in both the short and long term for the whole site;		
	<ul> <li>include information to justify a 2 m leachate head (if an increase in head is proposed) including cross-sections to show the height of side walls relative to ground level and an assessment of the impact of leachate seepages on surface water; and</li> </ul>	improvement condition 6.	
	<ul> <li>include measures for re-circulating, disposing or treating of leachate as appropriate based on actual and predicted leachate volumes taking into account the proposed leachate head.</li> </ul>		
	The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.		
	The operator shall implement the plan as approved, and from the date stipulated by the Environment Agency.		

Reference	Requirement	Date
3	The operator shall submit a written plan to the Environment Agency for approval. The plan shall contain a review of the landfill gas monitoring carried out following the implementation of the Emissions Assessment and Control Strategy dated January 2011 to determine whether the modified monitoring points provide facilities capable of monitoring landfill gas that is representative of each part of the landfill. The plan shall also include proposals for the installation of separate landfill gas monitoring facilities and a revised landfill gas monitoring programme should the review find that the gas monitoring is not representative of the gas generated.  The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.	
4	The operator shall submit to the Environment Agency in writing for approval a restoration plan for the site which includes waste quantities, waste types, and waste acceptance criteria for wastes for restoration.	
5	The operator shall submit a drawing showing the pre-settlement levels at the site (2.6.6).	
6	The operator shall submit an up to date Leachate Management Plan (LMP) for the existing part of the landfill and for the new cells (11 to 15) to the Environment Agency for approval. This must be written in accordance with current Environment Agency guidance and include details of the current control measures, and long term management options for the site. It must also include details of the infrastructure in place to manage and monitor leachate through the operational and aftercare periods, and include but not be limited to the following information:	05/10/2020
	a) a plan showing the leachate extractions system, this should include information on:	
	<ol> <li>collection wells/systems, reinjection systems and drainage routes, such as above and below ground pipework and pipe diameter;</li> </ol>	
	II. construction details and history of the leachate extraction and monitoring wells.	
	b) details of how leachate head compliance limits are to be maintained, and contingency arrangements should the limits be exceeded.	
	c) provide information on the current leachate extraction measures including:	
	I. details on how leachate is currently managed, i.e. are pumps working at maximum capacity, or are extractions rates limited by storage and disposal capacities;	
	II. details of the leachate volumes recirculated, and stored;	
	III. records of the volumes of leachate treated via the reed beds, and volume disposed offsite to permitted facility.	
	d) detail of the proposed long term management of leachate for the site extension.	
	e) an up to date assessment of the water balance for the existing cells, and legacy volumes and assessment of the water balance for the new cells (11 to 15).	

Table S1.3 I	Table S1.3 Improvement programme requirements		
Reference	Requirement		
	f) details of inspection, maintenance and provision for any breakdown of the leachate management system.		
	The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.		
	The operator shall implement the plan as approved, and from the date stipulated by the Environment Agency.		
7	The operator shall submit an up to date Landfill Gas Risk Assessment and Gas Management Plan to include the new cells (11 to 15) in writing to the Environment Agency for approval. The document shall include, but not be limited to:	5/10/2020	
	a) the control measures currently used on site, and the long term landfill gas management options for the site extension;		
	b) full construction details of existing and proposed gas monitoring points for the whole site;		
	c) emission assessment and compliance limits for the monitoring points;		
	d) full details of the actions to be taken in the event of emissions/gas migration being detected off site at concentrations exceeding the assessment and compliance limits.		
	The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.		
	The operator shall implement the plan as approved, and from the date stipulated by the Environment Agency.		

Table S1.4 Pre-operational measures for future development			
Reference	Pre-operational measures	Pre-operational measures	
PO1	Waste deposit in Cell 12	Install additional perimeter gas monitoring wells GMP1, GMP2, GMP3, GMP7, GMP8 in line with Plan 2437/ESSD/D6b Gas Extraction and monitoring points, and submit a CQA Validation Report for condition 2.6.7.	

Table S1.5 Annual waste input limits		
Category	Limit Tonnes/Year	
Non-hazardous waste	60,000	
Inert waste	20,000	
Waste for restoration	To be agreed in accordance with condition 2.7.2.	
Total	80,000	

## Schedule 2 – List of permitted wastes

Table S2.1 Pe	ermitted waste types for disposal at a landfill for non-hazardous waste				
Waste code	Description				
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals				
01 04	wastes from physical and chemical processing of non-metalliferous minerals				
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07				
01 04 09	waste sand and clays				
01 04 10	dusty and powdery wastes other than those mentioned in 01 04 07				
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 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07				
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 03	plant-tissue waste				
02 01 04	waste plastics (except packaging)				
02 01 07	wastes from forestry				
02 01 10	waste metal				
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 01	waste bark and cork				
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 01	waste bark and wood				
03 03 08	wastes from sorting of paper and cardboard destined for recycling				
10	Wastes from thermal processes				
10 01	wastes from power stations and other combustion plants (except 19)				
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14				
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 12	waste glass other than those mentioned in 10 11 11				

Table S2.1 Pe	ermitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
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 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 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14	waste concrete and concrete sludge
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 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 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
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
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

Table S2.1 Pe	rmitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
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 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
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 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
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 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 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
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 04	plastic and rubber
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06

Waste code	Description
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
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
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 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 41	wastes from chimney sweeping
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

Table S2.2 Permitted waste types for restoration					
Waste code Description					
To be agreed in	accordance with condition 2.7.2.				

## **Schedule 3 – Emissions and monitoring**

Table S3.1 Leachate level limits and monitoring requirements						
Monitoring point reference/Description	Limit	Monitoring frequency	Monitoring standard and method			
Operational Cells or Phases (Any cells or phases	that do not have a final en	gineered cap ag	reed in accordance with the landfill engineering condition, 2.6)			
Cell 9: LEP9, LMP9	2 m above cell base	Quarterly	As specified in Environment Agency Guidance TGN02 (February			
Cell 10: LEP10, LMP10A, LMP10B	2 m above cell base		2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed			
Cells 11, 12, 13, 14, 15: LEP11, LEP12, LEP13, LEP14, LEP15, LMP11A, LMP11B, LMP12A, LMP12B, LMP13A, LMP13B, LMP14A, LMP14B, LMP15A, LMP15B	2 m above cell base		with the Agency as part of a leachate monitoring plan.			
Non Operational Cells or Phases (Any cells or ph	nases that have a final engi	neered cap agre	eed in accordance with the landfill engineering condition, 2.6)			
Cells A, B, C: LMPA, LMPB, LMPC	1 m above cell base	Quarterly	As specified in Environment Agency Guidance TGN02 (February			
Cell 1: LEP1, LMP1	0.9 m above cell base		2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed			
Cells 1A, 1B: LEP1A, LEP1B, LMP1B	1 m above cell base		with the Agency as part of a leachate monitoring plan.			
Cells 2, 3: LEP2, LMP2, LEP3, LMP3A, LMP3B	1.5 m above cell base					
Cell 4: LEP4, LMP4	1.2 m above cell base					
Cells 5, 6: LEP5, LMP5, LEP6, LMP6	1.5 m above cell base					
Cells 7, 8: LEP7A, LEP7B, LMP7, LEP8, LMP8	2 m above cell base					
Asbestos cell	2 m above cell base					

Emission point Ref. & Location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
[Note 1]	Methane	Biofilters	[Note 1]	Hourly mean	Annually	To be agreed in accordance with Improvement Condition 7,
	Hydrogen Sulphide		[Note 1]			or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Carbon Dioxide		No limit (% v/v)			
	Oxygen		No limit (% v/v)			

Note 1: To be agreed in accordance with Improvement Condition 7.

Table S3.3 Point	Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements							
Emission point Ref. & Location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method		
SW3 and SW4 on plan ref	рН	Surface water	>6 and <9	Spot Sample	Monthly	As specified in Environment Agency Guidance TGN02 (February 2003) or such other subsequent guidance as		
2437/ESSD/D10 V2	D/D10 Ammoniacal Nitrogen 0.6 mg/l may be agreed in writing	may be agreed in writing with the Environment Agency.						
	Chloride	1	250 mg/l					
	Total Suspended Solids		50 mg/l					

Table S3.4 Landfill g	Table S3.4 Landfill gas in external monitoring boreholes – limits and monitoring requirements					
Monitoring point Ref. /description	Parameter	Limit (incl. units)	Monitoring frequency	Monitoring standard or method		
GMP1 [Note 1],	Methane	1 % v/v [Note 2]	Monthly	As per LFTGN (Feb 2003) or such other subsequent guidance as		
GMP2 [Note 1],	Carbon dioxide	1.5% v/v [Note 2] may be agreed in writing with the E		may be agreed in writing with the Environment Agency.		
GMP3 [Note 1],	Oxygen	No limit (% v/v)		Record whether the ground is:		
GMP4, GMP5,	Atmospheric pressure	No limit (mbar)		Waterlogged		
GMP6,	Differential Pressure	No limit (mbar)		Frozen		
GMP7 [Note 1],	Donth to Book	No limit (mAOD)	Annually	_ Snow covered		
GMP8 [Note 1],	Depth to Base	No limit (mAOD)	Annually			
GMP9,				Record the presence and elevation of any water within the monitoring borehole.		
GMP10				<b>3</b> 11 <b>3</b> 11 3		

Note 1: To be installed under Pre-operational Condition PO1.

Note 2: Or as agreed in accordance with Improvement Condition 7 when completed.

Table S3.5 Landfill gas emissions from capped surfaces for cells that have accepted non-hazardous biodegradable waste – monitoring requirements					
Monitoring point Ref./description	Parameter	Monitoring frequency	Monitoring Standard or method		
Permanently capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.		
Temporarily capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.		
Whole site	Total Methane emission	As agreed with the Environment Agency	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.		
Uncapped areas	Methane concentration	Every 12 months	As agreed with the Environment Agency based on the wording of revised LFTGN 07 or landfill sector guidance or such other subsequent guidance as may be agreed in writing with the Environment Agency.		

Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In waste gas monitoring boreholes or sealed leachate wells or sacrificial gas extraction system	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly until gas extraction commences	Calibrated handheld monitoring instrument	For cells or phases which have no active gas extraction.  Gas extraction system shall be installed and extraction commenced once monitoring shows onset of methane production in waste at a rate that can be sustainably extracted.  Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring.
	Hydrogen Sulphide	Quarterly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (v3.0, 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	For cells or phases which have no active gas extraction.  Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring.  Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans.
Gas collection system at well control valve, manifolds (if applicable) and strategic points on gas system	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Gas flow rate or suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Monthly or at such other frequency as may be agreed in writing with the Environment Agency.	Calibrated handheld monitoring instrument.	Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken.  Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertaken.  Record the ambient air temperature and whether the ground is: waterlogged frozen snow covered

Table S3.6 Landfill gas – other monitoring requirements						
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
Gas collection system at well control valve	Hydrogen Sulphide	Six monthly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (V3.0, 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans		
Output to biofilters	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 (V3.0, 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency or a trace gas characterisation method agreed with the Environment Agency.	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling.		
Output to biofilters	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly	Calibrated handheld monitoring instrument.	Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken.		

Table S3.7 Leachate - other	er monitoring requirements			
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Operational Cells or Phase	es	•		
(Any cell or phases that do	o not have a final engineered cap agreed in	accordance wit	h condition 2.5)	
MEPP	Ammoniacal Nitrogen, Arsenic, BOD, Cadmium, Calcium, Chloride, Chromium, COD, Copper, Electrical Conductivity, Iron, Lead, Magnesium, Manganese, Nickel, pH, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Quarterly	At leachate extraction and quality monitoring points listed in Table 2437/ESSD/T6 of the ESSD (January 2020 version F4).  As specified in Environment Agency Guidance LFTGN02 'Monitoring of	None
MEPP	Hazardous substances	Annually	Landfill Leachate, Groundwater and Surface Water' (February 2003), risk	
MEPP	Depth to base (mAOD)	Annually	assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.	
Non Operational Cells or P	Phases	•		
(Any cell or phases that ha	ave a final engineered cap agreed in accord	ance with condi	ition 2.6	
MEPP	Ammoniacal Nitrogen, Arsenic, BOD, Cadmium, Calcium, Chloride, Chromium, COD, Copper, Electrical Conductivity, Iron, Lead, Magnesium, Manganese, Nickel, pH, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Annually	At leachate extraction and quality monitoring points listed in Table 2437/ESSD/T6 of the ESSD (January 2020 version F4).  As specified in Environment Agency Guidance LFTGN02 'Monitoring of	None
MEPP	Hazardous substances	Once every four years	Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental	eed
MEPP	Depth to base (mAOD)	Annually	permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.	

Table S3.8 Surface water – other monitoring requirements				
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
MEPP	Ammoniacal Nitrogen Chloride Electrical conductivity pH Suspended solids Visual Oil and Grease	Monthly	Spot sample	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk) or such other subsequent guidance as may be 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	Reporting period*	Period ends		
Leachate level As specified by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December		
Point source emission to air As specified by schedule 3, table S3.2	Every 12 months	31 December		
Point source emission to water (other than sewer) As specified by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December		
Landfill gas in external monitoring boreholes As specified by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December		
Emission of landfill gas from capped surfaces As specified by schedule 3, table S3.5	Every 12 months	31 December		
Other Landfill gas monitoring As specified by schedule 3, table S3.6	Every 3 months	31 March, 30 June, 30 September, 31 December		
Trace gas monitoring	Every 12 months	31 December		
Other leachate monitoring As specified by schedule 3, table S3.7	Every 12 months	31 December		
Other surface water monitoring As specified by schedule 3, table S3.8	Every 12 months	31 December		
Meteorological data Landfill Directive, annex III, section 2	Every 12 months	31 December		

<sup>\* -</sup> where the reporting period is 12 months, you may submit this information as part of the 'annual report' required by condition 4.2.2.

Table S4.2 Annual production/treatment	
Leachate:	Cubic metres/year
Disposed of off site;	
Recirculated into the waste mass	
Landfill gas:	Normalised cubic metres/year
Methane generation rate (50%ile from a representative model)	m³/hr

Table S4.3 Performance Parameters			
Parameter	Frequency of assessment	Annual total	Unit
Energy used (including for leachate treatment)	Annually		MWh of electricity or natural gas

Table S4.4 Reporting Forms			
Media/parameter	Reporting Format	Date of Form	
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	01/01/2015	
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	To be agreed in accordance with Improvement Condition 7	
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	03/07/2020	
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	01/01/2015	
Waste Return	E-waste Return Form	-	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	01/01/2015	

#### Schedule 5 - Notification

This page outlines 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 significantly affect the environment	any incident or accident which significantly affects or may
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 th	e breach of a li	mit	
To be notified within 24 hours of de	etection unless	otherwise specified	below
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follow	ing detection o	of a breach of a limit	
Parameter			Notification period
(c) Notification requirements in the immediate danger to human health on the environment			
To be notified within 24 hours of de	etection		
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 supplied a  Any more accurate information on the notification under Part A.		s practicable	
Measures taken, or intended to be taken a recurrence of the incident	ken, to prevent		
Measures taken, or intended to be tal limit or prevent any pollution of the en which has been or may be caused by	vironment		
The dates of any unauthorised emiss facility in the preceding 24 months.	ions from the		
Name*			
Post			
Signature			
Date			

<sup>\*</sup> authorised to sign on behalf of the operator

#### Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"annually" means once every year.

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

"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.

"background concentration" means such concentration of that substance as is present in:

- · For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge;
   or
- · For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

"cell layout drawing" means:

- (a) A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:
  - (i) the location of the new cell on the site;
  - (ii) the proposed level (Above Ordnance Datum) of the base of the excavation;
  - (iii) the proposed finished levels of all containment and leachate drainage layers;
  - (iv) the positions of leachate management infrastructure; and
  - (v) the positions of landfill gas infrastructure (if appropriate).
- (b) A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:
  - (i) changes to slope length and gradient within the cell;
  - (ii) new leachate or landfill gas infrastructure construction design;
  - (iii) slope stability issues such as new basal excavation level; and/or
  - (iv) depth of waste.

"Construction Proposals" means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the New Cell or Landfill Infrastructure.

"CQA Validation Report" means the final "as built" construction and engineering details of the New Cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- "As-built" plans and sections of the works;
- Copies of the site engineer's daily records;
- Records of any problems or non-compliances and the solution applied;

- Any other site specific information considered relevant to proving the integrity of the New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations 2016, SI 2016 No. 1154 and words and expressions used in this permit which are also used in those 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 or background concentration limit.

"exceeded" means that a value is above a permitted limit, or where a range of values or a minimum value is set as a permitted limit it means a value outside that range or below the minimum value, whichever is applicable.

"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 substances" as defined by the Environmental Permitting (England and Wales) Regulations 2016, SI 2016 No. 1154, schedule 22 and listed in our Hydrogeological risk assessment guidance.

"inert waste" means waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.

"landfill Infrastructure" means any specified element of the:

- · permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);
- · leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- · surface water drainage systems;
- · leachate monitoring wells;
- · groundwater monitoring boreholes;
- · landfill gas monitoring boreholes;
- landfill gas management systems;
- lining within the installation,

within the site.

"LFTGN 05" means Environment Agency Guidance for monitoring enclosed landfill gas flares.

"LFTGN 07" means Environment Agency Guidance on monitoring landfill gas surface emissions.

"LFTGN 08" means Environment Agency Guidance for monitoring landfill gas engines.

"liquids" means any liquid other than leachate within the engineered landfill containment system.

"List of Wastes" means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on

waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"medicinal product" means any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) or their predecessors under the Medicines Act 1968, section 130.

"MEPP" Monitoring and extraction point plan, required by condition 4.2.2(h) to specify extraction points and routine monitoring locations.

"new cell" means any new cell, part of a cell or other similar new area of the site where waste deposit is to commence after issue of this permit and can comprise:

- · groundwater under-drainage system;
- · permanent geophysical leak location system;
- leak detection layer;
- sub-grade;
- · barriers;
- · liners;
- · leachate collection system;
- leachate abstraction system;
- · separation bund/layer;
- cell or area surface water drainage system;
- · side wall subgrade and containment systems;

for the New Cell.

"no impact" means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

"pests" means Birds, Vermin and Insects.

"previous year" means the 12 month period preceding the month the annual report is submitted in.

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

"relevant waste acceptance procedures" means the procedure for the acceptance of waste at landfills and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

"relevant waste acceptance criteria" means the waste acceptance criteria and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

"review of the Hydrogeological Risk Assessment" means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the EP Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the EP Regulations.

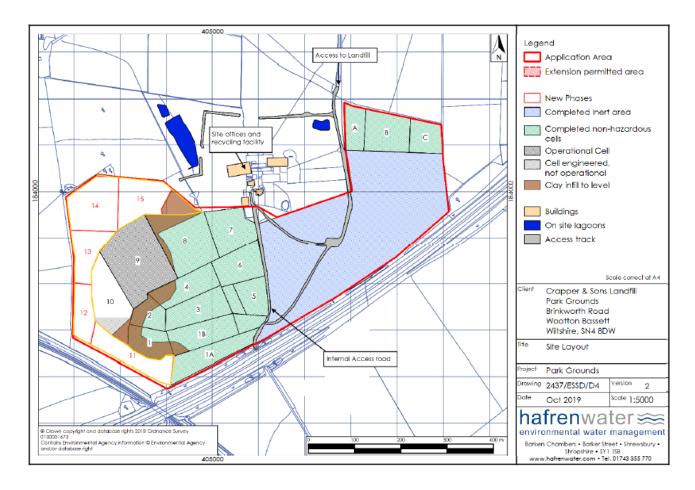
"sustainably extracted" means where suction can be applied to the extraction wells such that a flow rate of landfill gas, with a methane content capable of either being combusted, or treated by bio-oxidation, can be extracted without increasing the risk of air ingress to the waste or inducing aerobic degradation within the waste.

"waste code" - See "List of Wastes".

"WFD" means Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [and repealing certain Directives] – the Waste Framework Directive.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08.

## Schedule 7 - Site plan



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**END OF PERMIT**