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Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biffa Waste Services Limited

Roxby Landfill
Winterton Road
Roxby
Scunthorpe
North Lincolnshire
DN15 0BD

Variation application number

EPR/BW2951IM/V011

Permit number

EPR/BW2951IM

Roxby Landfill Permit number EPR/BW2951IM

Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2010 (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 variation is to increase the throughput of non-hazardous waste from 500,000 tonnes per annum to 1,075,000 tonnes per annum. The existing non-hazardous annual throughput of 500,000 tonnes shall include all currently permitted EWC codes.

The additional 575,000 waste throughput is restricted to the deposit of non-hazardous, low biodegradable wastes comprising "qualifying material" only, which consist of transfer station fines derived from processing of construction and demolition wastes and any additional contaminated soils, which will contain similar levels of biodegradable contamination. However the operator may want to take more than the 575,000 tonnes of qualifying material waste, which is acceptable, therefore the limit for the qualifying materials waste in table S1.5 is 1,075,000, which is also the total limit for non-hazardous waste combined.

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
Permit determined BW2951IM	19/04/05	Permit issued to Biffa Waste Services Limited
(EPR/BW2951IM/A001)		
Variation EPR/BW2951IM/V002	29/05/08	Update of the landfill template conditions
(PAS ref. TP3836LA) determined		
Variation EPRBW2951IM/V003	01/07/10	
(PAS ref. FP3737TC) received		
Variation EPRBW2951IM/V003	15/07/10	Variation to include waste code 20 01 99
(PAS ref. FP3737TC) issued		
Application	Duly made	Application to vary and update permit
EPR/BW2951IM/V004	11/04/13	
Variation determined	24/04/13	Administrative variation to remove flare A14 and
EPR/BW2951IM/V004		correct the number of flares.
Agency variation determined	30/05/13	Agency variation to implement the changes
EPR/BW2951IM/V005		introduced by IED
Application	Duly Made	Application to vary permit and consolidate the
EPR/BW2951IM/V006 (Variation	10/02/14	permit.
and Consolidation)		
Variation determined	08/05/14	Varied and consolidated permit issued.
EPR/BW2951IM/V006		

Status log of the permit		
Description	Date	Comments
Application EPR/BW2951IM/V007	Duly made 02/12/14	Application to vary and update the permit to modern conditions.
Additional information received	02/03/15; 29/04/15	Response to Schedule 5 notice; further information
Variation determined EPR/BW2951IM/V007	19/05/15	Varied and consolidated permit issued.
Variation determined EPR/BW2951IM	19/05/15	Varied and consolidated permit issued.
Variation determined EPR/BW2951IM/V008 [Billing ref. TP3936RS]	25/04/16	Environment Agency initiated variation to correct Table S4.1 (Phases 10-16).
Environment Agency Landfill Sector Review 2016 Permit reviewed Variation determined EPR/BW2951IM/V011 Permit EPR/BW2951IM	27/05/16	Varied and consolidated permit issued in modern condition format.
Variation application EPR/BW2951IM/V010	Duly made 01/04/16	Application for a leachate solidification process
Response to additional information request (dated 19/07/16) to application EPR/BW2951IM/V010	Received 28/07/16	Clarify aspects of risk assessment
Response to additional information request (dated 29/07/16) to application EPR/BW2951IM/V010	Received 01/08/16	Clarify aspects of risk assessment
Response to additional information request (dated 17/08/16) to application EPR/BW2951IM/V010	Received 25/08/16	Screening risk assessment
Variation determined EPR/BW2951IM/V010	05/10/16	
Billing ref. YP3033DW		
Variation application	Duly made 07/05/19	Application to increase the throughput of non-hazardous waste from 500,000 tonnes per annum to 1,075,000 tonnes per annum.
Response to additional information requested (dated 19/06/19)	16/08/19	Additional information in relation to the Landfill Gas risk assessment, Stability, Nuisance and Health risk assessment, Odour Management Plan and Financial Provision.
Variation determined EPR/BW2951IM/V011	03/12/19	Permit issued to Biffa Waste Services Limited
Billing ref: QP3237QH		

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/BW2951IM

Issued to

Biffa Waste Services Limited ("the operator")

whose registered office is

Coronation Road Cressex High Wycombe Buckinghamshire HP12 3TZ

company registration number 0946107

to operate a regulated facility at

Roxby Landfill Winterton Road Roxby Scunthorpe North Lincolnshire DN15 0BD

to the extent set out in the schedules.

The notice shall take effect from 03/12/19

Name	Date
Philip Lamb	03/12/2019

Authorised on behalf of the Environment Agency

Schedule 1

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

Condition 2.7 1(a) amended to include reference to table S2.2.

Condition 2.7.2 amended to refer to table S2.3.

Condition 3.3.2 removed as there is an agreed Odour Management Plan (OMP),

Table S1.2 to include additional operating techniques included in this variation and to exclude reference to superseded OMP dated 01/04/2016.

Table S1.3 to delete improvement conditions 7a, 7b, 7c, 10ii and IC11.

Table S1.5 as referred to by condition 2.7.7 – amended to include reference to non-hazardous waste consisting of 'Qualifying Material'.

Table 2.1 amended to remove EWCs 17 05 04, 17 05 06 and 17 05 08.

Table S2.2 added for 'Permitted waste types for disposal at a landfill for non-hazardous waste consisting of 'Qualifying Material' only'.

Table S2.3 added to include 'Permitted waste types for restoration'.

Schedule 2 - consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/BW2951IM

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BW2951IM/V011 authorising,

Biffa Waste Services Limited ("the operator"),

whose registered office is

Coronation Road Cressex High Wycombe Buckinghamshire HP12 3TZ

company registration number 0946107

to operate an installation at

Roxby Landfill Winterton Road Roxby Scunthorpe North Lincolnshire DN15 0BD

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

Name	Date
Philip Lamb	03/12/2019

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 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 19th April 2005 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.
- 1.2.3 Where the Environment Agency notifies the Operator that additional financial provision is required in respect of new monitoring points or boreholes this must be made within 3 months of the expenditure plan being approved (IC7c), otherwise deposit of waste must cease.

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 red 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 as soon as practicable following the construction of the relevant landfill infrastructure.
- 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, tables S2.1 and S2.2, 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 1400mm), 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 S2.3 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 or recovered in the landfill shall be limited by the pre-settlement levels shown on drawing ESID6a, dated 30/04/04.
- 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 limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.
- 3.1.4 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.5 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 S3.9;
 - (b) Point source emissions specified in tables S3.2 and S3.3;
 - (c) Groundwater specified in tables S3.4 and S3.7;
 - (d) Landfill gas specified in tables S3.5, S3.6 and S3.8;
 - (e) Surface water specified in table S3.10; and
 - (f) process monitoring specified in table S3.11;
- 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 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 leachate and landfill gas extraction and all 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 (a) In the event 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) in the event 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) in the event 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 a	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 2.7, as an integral part of landfilling.
A2	D9 – Physico-chemical treatment D13 – Blending and mixing prior to treatment D15 – Storage prior to treatment	Section 5.4 Part A(1)(a)(ii) Disposal of non-hazardous waste by physico-chemical treatment	Leachate solidification using waste fines and cement. Screening of waste fines.	Treatment of leachate arising from the landfill. Maximum quantity of 30,000 tonnes per year of leachate and 85,000 tonnes per year of waste fines. Screening of waste fines limited to 8,500 tonnes per year. Use of waste fines that are received for disposal by landfill, with the following EWC codes only: 01 01 01, 01 01 02, 01 04 08, 01 04 09, 01 04 12, 01 04 13, 10 01 01, 10 01 02, 10 01 15, 10 01 17, 17 01 01, 17 01 02, 17 01 07, 17 05 04, 17 05 08, 19 10 04, 19 12 09, 19 12 12. Maximum storage of waste fines 900 tonnes at any one time. Use of solidified leachate for daily cover, haul road construction and construction of non-structural blocks,
Directly Ass	sociated Activities	1	1	,
A3	R1 – use principally as a fuel to generate energy		Pre-treatment and utilisation of landfill gas for energy recovery in an appliance with a rated thermal input < 50MW	Treatment and utilisation of landfill gas arising from the landfill.

Table S1.1 activities			
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
N/A		Temporary storage of waste (leachate)	Leachate arising from the landfill.
N/A		Flaring of landfill gas for disposal in an appliance.	Landfill gas arising from the landfill.
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.
N/A		Storage of fuel for operation of plant and equipment.	Fuel storage tank.
R5: Recycling / reclamation of other inorganic material	-	Recovery of waste for restoration	The use of wastes in table S2.4 only to provide restoration material for the permitted landfill.
	WFD Annex I and II operations (where applicable) N/A N/A D6 - release to water body except seas/ oceans N/A R5: Recycling / reclamation of other	WFD Annex I and II operations (where applicable) N/A N/A D6 - release to water body except seas/ oceans N/A R5: Recycling / reclamation of other Activity listed in Schedule 1 of the EP Regulations - release to water body except seas/ oceans	WFD Annex I and II operations (where applicable) Activity listed in Schedule 1 of the EP Regulations Description of specified activity N/A Temporary storage of waste (leachate) N/A Flaring of landfill gas for disposal in an appliance. D6 – release to water body except seas/ oceans Discharges of site drainage from the landfill. N/A Storage of fuel for operation of plant and equipment. R5: Recycling / reclamation of other - Recovery of waste for restoration

Table S1.2 Operating technique			
Description	Parts	Date Received	
Application	The response to questions 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Form, but excluding the responses to questions B2.1.4-6 and B2.2.42	07/05/2004	
Response to Request for Information (report reference 4B/034/106)	Response provided to 1 question regarding the Expenditure Plan; 7 questions regarding the ESID report; 11 questions regarding the Hydrogeological Risk Assessment (RA); 21 questions on the Landfill Gas RA; 17 questions regarding the Stability RA; and 1 question regarding the Nuisance and Health RA.	10/12/2004	
Overtipping management plan submitted in response to improvement condition 5a (BW2951IM dated 19 April 2005)	SLR Consulting Ltd report entitled: "Roxby Landfill Site Recontouring management plan, odour management plan, BAT assessment, odour impact assessment and Revised nuisance and health risk assessment" (Issue 4. Project No. 402-0034-00150); and "Roxby Landfill Site Odour impact Assessment – Addendum".(Issue 1 Project No. 402-0034-00168), dated. 7 December 2005.	19/10/2005	
Odour management plan submitted in response to improvement conditions 5b, 5c, 5d (BW2951IM dated 19 April 2005)	402-0034-00106), dated. 7 December 2003.	07/12/2005	
Landfill gas surface emissions monitoring plan submitted in response to improvement condition 8	Biffa Waste Services Ltd report entitled, "Roxby landfill gas surface emissions monitoring plan", dated October 2005	28/10/2005	
Landfill gas risk assessment (revised) submitted in response to improvement condition 6	Biffa Waste Services Ltd report entitled, "Roxby landfill site revised landfill gas risk assessment", dated March 2006.	20/03/2006	
Bio-aerosol (human health) risk assessment submitted in response to improvement condition 9	Biffa Waste Services Ltd report entitled, "Roxby landfill site Bioaerosol Risk Assessment", dated March 2006.	25/03/2006	
Water balance analysis submitted in response to improvement condition 2 (BW2951IM dated 19 April 2005)	Letter from Biffa Waste Services Ltd., dated 3 April 2006.	03/04/2006	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Geological barrier (retardation parameters) submitted in response to improvement condition 10	Letter from Biffa Waste Services Ltd., dated 13 April 2006.	13/04/2006
Existing leachate and groundwater characterisation submitted in response to improvement conditions 1 and 4 (BW2951IM dated 19 April 2005)	Biffa Waste Services Ltd report entitled, "Roxby landfill site assessment of leachate and groundwater data", dated April 2006.	17/04/2006
Landfill gas management plan (updated) submitted in response to improvement condition 7	Biffa Waste Services Ltd report entitled, "Roxby landfill site. Gas management and control specification", dated April 2006.	24/04/2006
Groundwater Management Plan	All parts	November 2013
Variation application EPR/BW2951IM/V007	Application form C3, section 3; supporting statement C3.3b.	02/12/2014
Schedule 5 notice and further information request	All parts of response to Schedule 5 notice; Further information request, including Leachate Management Plan April 2015.	02/03/2015; 29/04/2015
Variation application EPR/BW2951IM/V010	The response to application form C3, section 3 excluding mention of 'How to Comply' and odour management plan. Amenity risk assessment Application supporting statement (BF4926/EPVA) section 2. Section 1.5 of the stability risk assessment	01/04/2016
Response to additional information request (dated 19/07/16) to application EPR/BW2951IM/V010	Response to questions 1 and 2	28/07/2016
Response to additional information request (dated 29/07/16) to application EPR/BW2951IM/V010	Response to question 1	01/08/2016

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to additional information request (dated 17/08/16) to application EPR/BW2951IM/V010	All of the response	25/08/2016
Submission in relation to Improvement Condition IC11	Roxby Landfill Site Restoration Plan v3 August 2017.	11/08/17
Submission in relation to IC10ii	Leachate Management Plan May 2018	10/05/2018
Response to additional information request (dated 19/06/19)	Updated Odour Management Plan v5 Aug 2019 and Stability Risk Assessment addendum report ref: BF5009/SRAR	22/08/2019

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
12	The operator submit a monitoring plan for approval for monitoring volatile organic compounds and ammonia in the vicinity of the leachate solidification process. The plan shall include the methods that will be used, the equipment that will be used and the frequency of monitoring. The Operator shall carry out the monitoring as specified in the approved monitoring plan and submit a report to the Environment Agency summarising the results and comparing them to	Within 3 months of first operating the leachate solidification process
	the information provided in variation application EPR/BW2951IM/V010.	
13	The operator shall submit a report to the Environment Agency summarising the results of the leachability testing carried out on the solidified leachate, as required through table S3.11. The report shall include a proposal for the need and frequency of on-going leachate monitoring.	Within 7 months of first operating the leachate solidification process

Reference	Operation	Pre-operational Measures
1	Construction of each future cell/phase	Future slope stability analysis shall be clearly annotated to show the parameters used and the strata analysed. All future stability risk assessment submissions shall provide cross-sections that clearly show all strata relevant to the analyses. All pre-cell formation slopes must be inspected for perched water tables, seepages and soft areas and the subsequent inclusion of 'back drainage' into the side slope design where deemed necessary.
2	Construction of each future cell/phase	The operator shall submit to the Agency for approval design and CQA proposals for all leachate and gas collection infrastructure (i.e. boreholes and pipework). These shall incorporate at least two leachate head monitoring points remote from the point of leachate extraction in each hydraulically contained landfill cell/phase that will be more than 5 ha in size.
3	Construction of each future cell/phase	An estimate of the likely settlement in the backcast Lias Clay shall be made and submitted to the Agency. Measures necessary to mitigate the effects of settlement shall be presented as appropriate. Settlement cells shall be installed to monitor the settlement against the design predictions to confirm that the mitigation proposed will be adequate.
4	Construction of each future cell/phase	A revised Stability Risk Assessment shall be submitted with CQA plan for the construction of the basal and side slope lining systems to include:
		 Selection of parameters for stability risk analyses to be submitted along with an analysis for sensitivity to a reduced c' value and reduced pore pressure as represented by the r u coefficient.
		Calculation of all extraction and monitoring well loads and bearing capacities
		 Use of site specific values for soils and geotextiles proposed.
		 An explanation and derivation for the moduli for waste used.
		Sensitivity analyses for all parameter values chosen.
		The operator shall submit to the Agency for approval any changes to the approved design (which is to include the use of telescopic leachate extraction risers)
5	Over tipping or deposit of waste to previously filled areas	No overtipping or deposit of waste to previously filled areas of the landfill installation shall be carried out without the prior written approval from the Environment Agency.
6	Commissioning of leachate treatment plant	Details of transfer points to the leachate treatment plant, monitoring parameters, monitoring limits and monitoring frequencies shall be submitted to the Agency three months prior to the proposed leachate treatment plant being commissioned.

Reference	Operation Operation	Pre-operational Measures
7	Leachate recirculation	The operator shall submit to the Agency a detailed leachate recirculation management plan.
		The plan shall include the:
		Methods of recirculation to be used
		Methods to be employed to prevent or otherwise minimise risk of nuisance from odours or bio-aerosols;
		Mitigation measures to be taken in the event of problems with nuisance or perched leachate
		The operator shall specify within the plan that the recirculation of leachate shall only be undertaken in completely filled phases with no adjacent temporary waste slopes. The leachate recirculation management plan shall only be implemented upon receipt of written agreement from the Environment Agency and the operator shall undertake any measures approved in writing by the Agency to the timescales indicated in the approval.
8	At least 7 days before first operating the leachate solidification process.	The operator shall submit a site plan showing the location of the leachate solidification process.
9	At least 7 days before operating the leachate solidification process in a new location.	The operator shall submit a site plan showing the location of the leachate solidification process

Table S1.5 Annual waste input limits	
Category	Limit Tonnes/ Year
Non-hazardous waste Note 1	500,000
Non-hazardous waste comprising "qualifying material" Note 1	1,075,000
Inert Waste	25,000
Waste for restoration	200,000
Note ¹ The total for Non-hazardous waste and Non-hazardous waste comprising "qualifying material" shall not exceed 1,075,000	

Schedule 2 – List of permitted wastes

Table S2.1 Permitted 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 01	wastes from mineral excavation
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
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 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
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 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste

Table S2.1 Per	mitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
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 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
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 01	wastes from washing, cleaning and mechanical reduction of raw materials
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 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 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling

Table S2.1 Perr	mitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
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 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 02	liming waste
04 01 06	sludges, in particular from on-site effluent treatment containing chromium
04 01 07	sludges, in particular from on-site effluent treatment free of chromium
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
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
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

Waste code	Description
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 MSFU 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 opacificiers
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
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 17	waste containing silicones other than those mentioned in 07 02 16
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

Table S2.1 Per	mitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
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 03	wastes from MFSU of printing inks
08 03 07	aqueous sludges 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
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
09	Wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
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 02	unprocessed slag

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Waste code	Description
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
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
	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 07 08	wastes from cooling water treatment other trial triose mentioned in 10 07

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Waste code	Description
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
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

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Description	
wastes from manufacture of ceramic goods, bricks, tiles and construction products	
waste preparation mixture before thermal processing	
particulates and dust	
sludges and filter cakes from gas treatment	
discarded moulds	
waste ceramics, bricks, tiles and construction products (after thermal processing)	
solid wastes from gas treatment other than those mentioned in 10 12 09	
wastes from glazing other than those mentioned in 10 12 11	
sludge from on-site effluent treatment	
wastes from manufacture of cement, lime and plaster and articles and products made from them	
waste preparation mixture before thermal processing	
wastes from calcination and hydration of lime	
particulates and dust (except 10 13 12 and 10 13 13)	
sludges and filter cakes from gas treatment	
wastes from asbestos-cement manufacture other than those mentioned in 10 13 09	
wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10	
solid wastes from gas treatment other than those mentioned in 10 13 12	
waste concrete and concrete sludge	
Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy	
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)	
sludges and filter cakes other than those mentioned in 11 01 09	
degreasing wastes other than those mentioned in 11 01 13	
wastes from non-ferrous hydrometallurgical processes	
wastes from the production of anodes for aqueous electrolytical processes	
wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05	
wastes from hot galvanising processes	
zinc ash	
Wastes from shaping and physical and mechanical surface treatment of metals and plastics	
wastes from shaping and physical and mechanical surface treatment of metals and plastics	
ferrous metal dust and particles	
non-ferrous metal dust and particles	
plastics shavings and turnings	

Waste code	Description
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
15 01	packaging (including separately collected municipal packaging waste)
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile 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 19	Plastic
16 01 20	Glass
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 08	spent catalysts
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
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)
	concrete, bricks, tiles and ceramics

nitted waste types for disposal at a landfill for non-hazardous waste
Description
Concrete
Bricks
tiles and ceramics
mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
wood, glass and plastic
Wood
Glass
Plastic
bituminous mixtures, coal tar and tarred products
bituminous mixtures other than those mentioned in 17 03 01
metals (including their alloys)
cables other than those mentioned in 17 04 10
insulation materials and asbestos-containing construction materials
insulation materials other than those mentioned in 17 06 01 and 17 06 03
other construction and demolition wastes
mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
wastes from natal care, diagnosis, treatment or prevention of disease in humans
wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
wastes from research, diagnosis, treatment or prevention of disease involving animals
wastes whose collection and disposal is not subject to special requirements in order to prevent infection
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
wastes from incineration or pyrolysis of waste
bottom ash and slag other than those mentioned in 19 01 11
fly ash other than those mentioned in 19 01 13
boiler dust other than those mentioned in 19 01 15
pyrolysis wastes other than those mentioned in 19 01 17
sands from fluidised beds

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Waste code	Description
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 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 06	wastes from anaerobic treatment of waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
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 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05

Table S2.1 Perr	nitted waste types for disposal at a landfill for non-hazardous waste
Waste code	Description
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 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)
19 12 10	combustible waste (refuse derived fuel)
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 08	biodegradable kitchen and canteen waste
ļ	niouegrauable kilonen anu canteen waste
20 01 10	Clothes
20 01 10 20 01 11	
	Clothes
20 01 11	Clothes Textiles
20 01 11 20 01 25	Clothes Textiles edible oil and fat
20 01 11 20 01 25 20 01 28	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 11 20 01 25 20 01 28 20 01 30	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41 20 01 99	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41 20 01 99	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection garden and park wastes (including cemetery waste)
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41 20 01 99 20 02 20 02 01	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection garden and park wastes (including cemetery waste) biodegradable waste
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41 20 01 99 20 02 20 02 01 20 02 02	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection garden and park wastes (including cemetery waste) biodegradable waste soil and stones
20 01 11 20 01 25 20 01 28 20 01 30 20 01 38 20 01 39 20 01 41 20 01 99 20 02 20 02 01 20 02 02 20 02 03	Clothes Textiles edible oil and fat paint, inks, adhesives and resins other than those mentioned in 20 01 27 detergents other than those mentioned in 20 01 29 wood other than that mentioned in 20 01 37 Plastics wastes from chimney sweeping Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection garden and park wastes (including cemetery waste) biodegradable waste soil and stones other non-biodegradable wastes

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste					
Waste code	Description				
20 03 03	street-cleaning residues				
20 03 04	septic tank sludge				
20 03 06	waste from sewage cleaning				
20 03 07	bulky waste				

Table S2.2 Permitted waste types for disposal at a landfill for non-hazardous waste consisting of 'Qualifying Material' only.							
Waste code	Description						
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						
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified						
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11						

Table S2.3 Per	rmitted waste types for restoration						
Waste code	Description						
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals						
01 01	wastes from mineral excavation						
01 01 01	wastes from mineral metalliferous excavation						
01 01 02	wastes from mineral non-metalliferous excavation						
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						
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 04	wastes from sugar processing						
02 04 01	soil from cleaning and washing beet						
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard						
03 03	wastes from pulp, paper and cardboard production and processing						
03 03 09	lime mud waste						
10	Wastes from thermal processes						
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products						

Table S2.3 Perr	mitted waste types for restoration							
Waste code	Description							
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)							
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 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 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 05	wastes from aerobic treatment of solid wastes							
19 05 03	off-specification compost							
19 08	wastes from waste water treatment plants not otherwise specified							
19 08 05	sludges from treatment of urban waste water							
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified							
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							
20 02	garden and park wastes (including cemetery waste)							
20 02 02	soil and stones							

Schedule 3 – Emissions and monitoring

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	engineered cap a	agreed in accordance with the landfill engineering condition, 2.6)
Area B Phase 5 LC5R (95303140) LC5.2R (95303240)	11 m AOD, or 6 m above cell base ¹	Monthly	As specified in Environment Agency Guidance TGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed with the Agency as part of a leachate monitoring plan.
Area B Phase 7A LC7A1 (95303181) LC7A2 (95303280) LC7A.3R (95303180)	11 m AOD, or 2.83 m above cell base ¹		
Area C Phase 9 LC9R (95303283) LC91R (95303183) LC92R (95303383)	11.5 m AOD, or 3.3 m above cell base		
Area D Phase 8 LC8 (95303082) LC81(95303182) LC82 (95303282)			

Monitoring point reference/Description	Limit	Monitoring frequency	Monitoring standard and method		
Area E Phase 6 LC6 (95303070) LC6.2R (95303170)	13 m AOD, or 4 m above cell base				
Area F Phase 7B LC7B (95303081)	11.5 m AOD, or 3 m above cell base				
Haul Road LCHR (95303060)	23.80 mAOD or 2 m above cell base				
Phases 10 – 16 future	To be determined upon completion of engineering				
All additional and/or replacement leachate head monitoring points as shown on MEPP	In accordance with each phase as shown above				
Non Operational Cells or Phases (Any cell Phase 1	s or phases that have a final en	ngineered cap agr	reed in accordance with the landfill engineering condition, 2.6) As specified in Environment Agency Guidance TGN02		
LC1 (95303018)	above cell base	Quarterly	(February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as		
Phase 2 LC2 (95303019)	12.83 m AOD, or 2 m above cell base		otherwise agreed with the Agency as part of a leachate monitoring plan.		
Phase T3 LCT3 (95303021)	11.39 m AOD, or 2 m above cell base				

Table S3.1 Leachate level limits and monitoring requirements							
Monitoring point reference/Description	Limit	Monitoring frequency	Monitoring standard and method				
Phase T4 LCT4 (95303050) LCT42 (95303150) LCT43 (95033250) Area A Phase 3 LC3R (95303120) LC3.2R (95303220)	10 m AOD, or 2 m above cell base 12 m AOD, or 3.5 m above cell base ¹						
Area B Phase 4 LC4R (95303130)	11. m AOD, or 6.5 m above cell base ¹						

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Referenc e Period	Monitoring Frequency	Monitoring Standard or Method
Jenbacher JGC Engines	Oxides of Nitrogen	Gas utilisation		Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency	
Southern Compound	СО	plant	1500 mg/m ³			
A1-A3 Jenbacher JGC Northern Compounds A5 – A8 shown on Drawings ESID8 (layout) and ESID6b (detail)	Total VOCs Northern Dounds A8 In on Jings 8 (layout) ESID6b	1750 mg/m³ 500 mg/m³ 1400 mg/m³				
Jenbacher Engine Southern Compound	Oxides of Nitrogen		500 mg/m ³			
A4 shown on Drawings	СО					
ESID8 (layout) and ESID6b (detail)	Total VOCs	-	1000 mg/m ³			
Flares A9 – A11 shown on	Oxides of Nitrogen	Landfill Gas	150 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Drawings ESID8 (layout)	СО	Flares	100 mg/m ³			Monitoring is unnecessary where the flare is active for
and ESID6b (detail)	Total VOCs		10 mg/m ³			<10% of the year.

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Referenc e Period	Monitoring Frequency	Monitoring Standard or Method
Flare A12 shown on Drawings	Oxides of Nitrogen	Landfill Gas Flares	150 mg/m ³			
ESID8 (layout) and ESID6b (detail)	СО		50 mg/m ³			
	Total VOCs	-	10 mg/m ³	-		

Table S3.3 F	Point source em	issions to water	(other than s	sewer) – emission	limits and monito	ring requirements
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Interceptor 1 (95304004)	Chloride	Drainage from railway sidings via interceptor	250 mg/l	Spot Sample	Monthly	As specified in Environment Agency Guidance TGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency
Interceptor 2 (95304005)	Ammoniacal Nitrogen		2 mg/l			
Northern lake discharge	Chloride	Drainage from site, via lake or	250 mg/l			
(95304003)	Ammoniacal Nitrogen	balancing pond	2 mg/l			

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Southern balancing pond	Chloride	Drainage from site, via	250 mg/l			
discharge (95304006)	Ammoniacal Nitrogen	balancing pond	2 mg/l			

Table S3.4 Groundw	Table S3.4 Groundwater – emission limits and monitoring requirements									
Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method					
RL1 (95302022) RL2A (95302123)	Ammoniacal Nitrogen	2 mg/l	Spot Sample	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface					
RL3A (95302124) RL9D (95302031)	Chloride	250 mg/l			Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version					
	Cadmium	0.13 mg/l			2.1, Dec 2011or such other subsequent guidance as may be					
RL10D (95302033) RL11D (95302035)	Mecoprop	0.00014 mg/l			agreed in writing with the Environment Agency.					
RL12D (95302037) As shown on drawing R2180108	m, p- xylene	0.003 mg/l								
	Naphthalene	0.000032 mg/l								
	Nickel	0.086 mg/l	1							
	Toluene	0.004 mg/l								

Monitoring point Ref. /description	Parameter	Limit (includin g units)	Monitoring frequency	Monitoring standard or method
G1 (95301001)	Methane	1 %v/v	Monthly	As per LFTGN03 (September 2004) or such other subsequent guidance as may be
G2 (95301002) G3 (95301003)	Carbon Dioxide	No limit		agreed in writing with the Environment Agency.
G4 (95301004)	Oxygen	no limit	Record whether the ground is:	Record whether the ground is: waterlogged
G19 (95301037) G20 (95301038) G21 (95301039) G22 (95301042) As shown on drawing R2180108	Atmospheric pressure	no limit		frozen snow covered
G5 (95301005) G6 (95301006) G7 (95301007)	Methane	1.0 %v/v		
G9 (95301009) G10 (95301010) G13 (95301013) G14 (95301014)	Carbon Dioxide	4.5 %v/v		
G15 (95301015) G16 (95301016) G17 (95301017)	Oxygen	No limit		
G18 (95301041) As shown on drawing R2180108	Atmospheric pressure	No limit		
G8 (95301008)	Methane	1.0 %v/v	1	
RL1A (95301122) RL8 (95301029)	Carbon Dioxide	2.0 %v/v		

Monitoring point Ref. /description	Parameter	Limit (includin g units)	Monitoring frequency	Monitoring standard or method
as shown on drawing R2180108	Oxygen	No limit		As per LFTGN03 (September 2004) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
drawing 112 100 100	Atmospheric pressure	No limit		Record whether the ground is:
G12 (95301012) GMon1 (95301031) GMon2 (95301032)	Methane	1.0 %v/v		waterlogged frozen snow covered
GMon3 (95301033) GMon4 (95301034) GMon2 Remote	Carbon Dioxide	1.5 %v/v		
Shallow (95301035) G Mon2 Remote	Oxygen	No limit		
Deep (95301036) as shown on drawing R2180108	Atmospheric pressure	No limit		
G11 (95301011)	Methane	1.0 %v/v]	
as shown on drawing R2180108	Carbon Dioxide	5.5 %v/v	1	
	Oxygen	No limit		
	Atmospheric pressure	No limit	1	

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			
Up gradient MEPP	conductivity, chloride, ammoniacal nitrogen, pH,		As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3,			
			version 2.1, Dec 2011), or such other subsequent guidance as may be agreed i writing with the Environment Agency.			
	Hazardous substances	Annually for first six years of operation				
Down or cross gradient MEPP	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH, Cadmium, Mecoprop, m,p-xylene, Naphthalene, Nickel and Toluene.	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec 2011), or such other subsequent guidance as may be agreed in writing with the Environment Agency.			
	total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese Hazardous substances detected in leachate Annually for first six years of operation then every two years		After the initial 6 year monitoring period for hazardous substances, if the result of quarterly or annual monitoring suggest an increase in contamination, the operator shall also undertake a full leachate hazardous substances screen.			
MEPP	Base of monitoring point (mAoD)	Annually				

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, March 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

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
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 undertake Record the ambient air temperature and whether the ground is: waterlogged frozen snow covered
Gas collection system at well control valve	Hydrogen sulphide	Six monthly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (v3, March 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

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Output to flare or LFG Utilisation Compound	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 (v3, March 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 flare or LFG Utilisation Compound	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly		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.

				041 161 41
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Flares A9 – A13 shown on Drawings ESID8 (layout) and ESID6b (detail)	Temperature	As per LFTGN05 (v2, March 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	
Jenbacher JGC Engines Southern Compound A1-A4 Jenbacher JGC Northern Compounds A5 – A8 shown on Drawings ESID8 (layout) and ESID6b (detail) post turbo	NOx and CO	Quarterly	In accordance with Appendix C of LFTGN08, (v2, 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.	Where monitoring using hand-held, electrochemical equipment indicates an exceedance of the emissions standards specified in Table S3.2, these shall be used as action levels and the operator shall investigate the cause and take appropriate measures to reduce emissions.

Monitoring point reference or	Parameter	Monitoring	Monitoring standard or method	Other	
description		frequency	specification		
Operational Cells or Phases		At leachate compliance point as listed in			
(Any cell or phases that do not have the condition 2.6)	nave a final engineered cap agreed in	accordance	table S3.1. As specified in Environment Agency		
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, Chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Guidance TGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec 2011 with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing with the Environment Agency.	None		
MEPP	Hazardous substances	Annually	1	None	
MEPP	Depth to base	Annually	7	None	
	(mAoD)				
Non Operational Cells or Phases	;				
(Any cell or phases that have a f condition 2.6)	inal engineered cap agreed in accord	ance with			
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, Chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese,	Annually			
MEPP	Hazardous substances	Once every four years		None	

Table S3.9 Leachate – other monitoring requirements						
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
MEPP	Depth to base (mAoD)	Annually				

Table S3.10 Surface water	r – other monitoring re	equirements		
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
MEPP	Ammoniacal nitrogen Chloride Suspended Solids Visual Oil and Grease pH electrical conductivity Sulphate (Northern Lake only)	Monthly	Spot sample	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (Annex J3, version 2.1, Dec 2011) or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Table S3.11 Process monitoring requirements					
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
Solidified leachate	L/S 10 leaching test	Monthly for first 6 months of operation and then as agreed through improvement condition IC 13	BS EN 12457-2002 Part 1 and prEN 14405).		

Schedule 4 – Reporting

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

Parameter	Reporting period	Period ends	
Leachate and/ or groundwater 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 \$3.2	Every 12 months	31 December	
Point source emission to water (other than sewer) As specified by schedule 3, table \$3.3	Every 3 months	31 March, 30 June, 30 September, 31 December	
Emission to groundwater As specified by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December	
Landfill gas in external monitoring boreholes As specified by schedule 3, table S3.5	Every 3 months	31 March, 30 June, 30 September, 31 December	
Emission of landfill gas from capped surfaces As specified by schedule 3, table \$3.6	Every 12 months	31 December	
Other groundwater monitoring As specified by schedule 3, table \$3.7	Every 3 months	31 March, 30 June, 30 September, 31 December	
Other Landfill gas monitoring As specified by schedule 3, table S3.8	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 S3.9	Every 12 months	31 December	
Other surface water monitoring As specified by schedule 3, table S3.10	Every 12 months	31 December	
Meteorological data Landfill Directive, annex III, section 2	Every 12 months	31 December	
L/S 10 leaching test as specified by schedule 3, table S3.11	Every 3 months	31 March, 30 June, 30 September, 31 December	

* - 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;				
Disposed of to any onsite effluent treatment plant;				
Recirculated into the waste mass.				
Accepted from offsite for treatment at any onsite effluent treatment plant.				
Landfill gas:	Normalised cubic metres/year			
combustion in flares;				
combustion in gas engines;				
Other methods of gas utilisation.				
Average methane content entering the landfill gas utilisation or treatment compound (based on the annual average of Table S3.8 monitoring)	% methane v/v			
Methane generation rate (50%ile from a representative model)	m3 /hr			
Amount of solidified leachate produced	Tonnes per year			

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
Amount of leachate treated by solidification process	Annually		Tonnes
Amount of cement and waste fines used in the leachate solidification process	Annually		Tonnes
Non-conforming batches of solidified leachate	Quarterly		Number of batches and total tonnes

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	29/05/08	
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	29/05/08	
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	29/05/08	
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	29/05/08	
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	29/05/08	
Waste Return	Waste Return Form RATS2E	29/05/08	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	29/05/08	
Leachate, waste fines and cement used in solidification process	Form performance 1 or other reporting format to be agreed in writing with the Environment Agency	16/08/16	
Non-conforming batches of solidified leachate	Form performance 1 or other reporting format to be agreed in writing with the Environment Agency	16/08/16	

Schedule 5 - Notification

This page outlines the information that the operator must provide.

(b) Notification requirements for the breach of a limit

Emission point reference/ source

Measured value and uncertainty

To be notified within 24 hours of detection unless otherwise specified below

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	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is 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.	

Parameter(s)

Limit

(b) Notification requirements for	the breach of a lim	it	
To be notified within 24 hours of	detection unless o	therwise specified b	elow
Date and time of monitoring			
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follo	wing detection of	a breach of a limit	
Parameter			Notification period
(c) Notification requirements for	the detection of an	y significant adverse	e 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 supplied Any more accurate information on the notification under Part A.		practicable	
Measures taken, or intended to be t a recurrence of the incident	aken, to prevent		
Measures taken, or intended to be t limit or prevent any pollution of the which has been or may be caused by	environment		
The dates of any unauthorised emis facility in the preceding 24 months.	ssions from the		
Name*			
Post			
Signature			
Date			

^{*} 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.
 - (a) "Cell layout drawing" means: 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 2010, SI 2010 No.675. 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.

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

"Hazardous substances" as defined by the Environmental Permitting (England and Wales) Regulations 2010, SI 2010 No.675, schedule 22 and listed in our Hydrogeological risk assessment guidance, annex J to our H1 risk assessment guidance.

"Hazardous waste" has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

"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.

"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.

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

"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.

"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.

"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

"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.

"M2" means Environment Agency Guidance Monitoring of stack emissions to air.

"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.

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

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

"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" 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 fines" means waste with EWC codes 01 01 01, 01 01 02, 01 04 08, 01 04 09, 01 04 12, 01 04 13, 10 01 01, 10 01 02, 10 01 15, 10 01 17, 17 01 01, 17 01 02, 17 01 07, 17 05 04, 17 05 08, 19 10 04, 19 12 09, 19 12 12

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

Where the following terms appear in the waste code list in Tables S2.1 or S2.2 they have the meaning given below:

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

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

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

Article 2(a) says that 'PCBs' means:

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

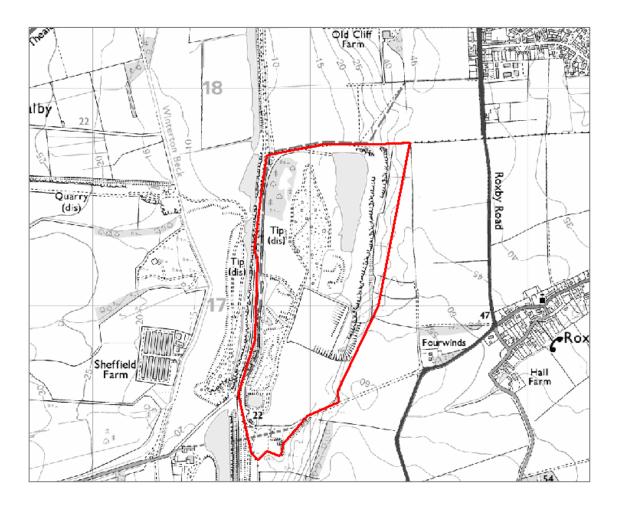
'transition metals' means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified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

'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



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