

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

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Lincwaste Limited

Colsterworth Landfill  
Off Crabtree Road  
Stainby  
Grantham  
Lincolnshire  
NG33 5QT

Variation application number  
EPR/BV1437IB/V008

Permit number  
EPR/BV1437IB

# Colsterworth Landfill

## Permit number EPR/BV1437IB

### 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.

We have varied the permit at the operator's request to incorporate the following changes:

- Consolidate and update the permit to modern template conditions;
- Remove condition 2.11.1 and 2.11.2 from the permit (site protection and monitoring programme);
- Replace conditions relating to groundwater and the Hydrogeological Risk Assessment; and
- Update Schedule 4 (now Schedule 3 in the varied permit) to reflect monitoring requirements at the site.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application - BV1437 (EPR/BV1437IB/A001)	Received 06/06/03	
Response to request for information	Request dated 25/07/03	Response dated 17/09/03. Letter from Golder Associates referenced 03523307.250 from Jeremy Lightfoot.
Request to extend determination	Request dated 02/10/03	Request accepted 07/10/03 by James Cook, referenced Colsterworth/PPC/JC071003.
Response to request for information on financial provision	Request dated 14/11/03. Letter from Phil Reynolds to Jeremy Lightfoot of Golder Associates.	Response dated 18/12/03. Letter from Golder Assoc. referenced 03523307.250 from Jeremy Lightfoot.

**Status log of the permit**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Response to request for information	Request by email dated 28/11/03 from Phil Reynolds to Jeremy Lightfoot of Golder Associates.	Email response dated 05/12/03 from Golder Associates from Jeremy Lightfoot.
Response to request for information on financial provision	Request dated 19/12/03	Response dated 19/12/03. Email from David Wilkes, SLR Consultants.
Response to request for information on financial provision.	Request dated 30/12/03	Agency no longer required gas engine information to complete FP.
Response to request for information from Bruce Bethune, Technical Specialist.	Verbal request from Bruce Bethune to Don Bradley of Golder Associates regarding the Gas Risk Assessment.	Response dated 16/12/03 email from Golder Associates from Don Bradley.
Request to extend determination.	Request Dated 30/12/03	Request accepted 05/01/04. James Cook referenced Colsterworth/PPC/JC071004
Permit determined - BV1437	06/02/04	EPR reference: EPR/BV1437IB
Submission of report relating to elevated carbon dioxide – Perimeter Borehole Gas Trigger Levels dated 1 March 2005.	01/03/05	
Permit varied - CP3131SK (EPR/BV1437IB/V002)	11/07/05	
Permit varied - BP3734LA (EPR/BV1437IB/V003)	27/07/07	
Application for variation - GP3033UV	Received 23/01/07	
Response to request for information	Request dated 17/05/07	Response dated 31/05/07. Letter from Golder Assoc. ref 06529137.250 from Jeremy Lightfoot.
Response to request for information	Request dated 31/05/07	Response dated 04/06/07. Email from Golder Associates referenced 06529137 - Colsterworth Gas from Jeremy Lightfoot.
Permit varied - GP3033UV (EPR/BV1437IB/V004)	02/08/07	
Application for variation - BP3631XJ	Received 10/10/07	
Permit varied - BP3631XJ (EPR/BV1437IB/V005)	30/05/08	

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Agency variation determined EPR/BV1437IB/V006	29/05/13	Agency variation to implement the changes introduced by IED
Variation application EPR/BV1437IB/V007	30/01/14	Application to vary the permit to add a requirement to the improvement programme.
Variation determined EPR/BV1437IB/V007	06/03/14	Varied permit issued.
Variation application EPR/BV1437IB/V008	30/04/14	Application to vary groundwater conditions, update schedule 3 (schedule 4 in V007) and update and consolidate the permit.
Variation determined EPR/BV1437IB/V008 (Billing Ref:VP3538VM)	24/07/14	Varied permit issued.

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/BV1437IB**

**issued to**  
**Lincwaste Limited** (“the operator”)

whose registered office is

**Ground Floor West**  
**900 Pavilion Drive**  
**Northampton Business Park**  
**Northampton**  
**NN4 7RG**

company registration number **02668959**

to operate a regulated facility at

**Colsterworth Landfill**  
**Off Crabtree Road**  
**Stainby**  
**Grantham**  
**Lincolnshire**  
**NG33 5QT**

to the extent set out in the schedules.

The notice shall take effect from 24/07/2014

Name	Date
<b>Thomas Ruffell</b>	<b>24/07/2014</b>

Authorised on behalf of the Environment Agency

## **Schedule 1**

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

- Conditions 2.11.1 and 2.11.2 have been removed from the permit (site protection and monitoring programme);
- Update Schedule 4 (now Schedule 3 in the varied permit) to reflect monitoring requirements at the site; and
- Consolidate and update the permit to modern conditions.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit



The Environmental Permitting (England and Wales) Regulations 2010

**Permit number**  
**EPR/BV1437IB**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BV1437IB/V008 authorising,

**Lincwaste Limited** ("the operator"),  
whose registered office is

**Ground Floor West**  
**900 Pavilion Drive**  
**Northampton Business Park**  
**Northampton**  
**NN4 7RG**

company registration number **02668959**

to operate an installation at

**Colsterworth Landfill**  
**Off Crabtree Road**  
**Stainby**  
**Grantham**  
**Lincolnshire**  
**NG33 5QT**

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

Name	Date
<b>Thomas Ruffell</b>	<b>24/07/2014</b>

Authorised on behalf of the Environment Agency

# Conditions

## Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit shall be as set out in the Deed of Performance dated 17 October 2007 between the Waste Recycling Group Limited (now known as FCC Environment (UK) Limited) and the Agency as varied by a Deed of Variation dated 15 October 2010 (as varied by further Deeds of Variation from time to time). The operator shall accordingly ensure that the Permit is and remains throughout its subsistence listed under Schedule 3 of that Deed as being a Permit to which the Deed relates.

### 1.3 Energy efficiency

1.3.1 The operator shall:

- (a) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (b) Implement any appropriate measures identified by a review.

## 2 Operations

### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

### 2.2 The site

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



## **2.3 Operating techniques**

- 2.3.1 (a) 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.
- (b) 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.
- 2.3.2 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## **2.4 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 condition**

- 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, 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,

- (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) where 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 The operator shall visually inspect:

- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
- (b) waste at the point of deposit;

and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.

2.7.3 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.

2.7.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.

2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ESID4/2.

2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.

2.7.7 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 flare the gas.
- 2.10.3 The operator shall:
- (b) 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 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.
- 3.1.2 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.
- 3.1.3 There shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.
- 3.1.4 There shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.
- 3.1.5 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.4 shall not be exceeded.
- 3.1.6 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
  - (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.
- 3.1.7 The limits for landfill gas arising from the installation set out in schedule 3, tables S3.5 and S3.6 shall not be exceeded.

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

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

### **3.3 Odour**

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

### **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 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 S3.8;
  - (b) Point source emissions specified in tables S3.2 and S3.3;

- (c) Groundwater specified in tables S3.4 and S3.10;
  - (d) Landfill gas specified in tables S3.5, S3.6 and S3.7;
  - (e) Surface water specified in table S3.9.
- 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:
- (a) annually, and
  - (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
  - (a) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

## 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 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; and
- (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 all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
- (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;
- (e) 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; and
- (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey.

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

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

- 4.2.4 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 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and



(b) any steps taken with a view to the dissolution of the operator.

In any other case:

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

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

## **4.4 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 "without delay", in which case it may be provided by telephone.

# Schedule 1 - Operations

**Table S1.1 activities**

Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity
Section 5.2 Part A(1) (a), The disposal of waste in a landfill.	Landfill for non-hazardous waste (D5 –Specially engineered landfill)	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.
<b>Directly Associated Activity</b>		
Burning of waste as a fuel	Combustion of landfill gas for the purposes of electricity generation	Landfill gas arising from the permitted landfill and from the adjacent closed Stainby Landfill
Landfill gas management	Flaring of landfill gas.	Landfill gas arising from the permitted landfill.
Leachate management	Storage of leachate in a facility.	Leachate arising from the permitted landfill.
Water discharges to controlled waters.	Discharges of site drainage from the landfill to soakaway.	From surface water/groundwater management system to point of entry to controlled waters.

**Table S1.2 Operating techniques**

Description	Parts	Date Received
Application	The response to questions, 1.2, 2.1, 2.2, 2.3, 2.4, 2.5 and 3.1 in part B of the Application Form.	06/06/2003
Response to letter dated 25/07/03	The response to the questions raised were responded to and submitted by a letter from Golder Associates, referenced 03523307.250 dated 17/09/03, which provides additional information on sections 2.6, 2.8, 4.1 and Section A Appendix IV of the application.	18/09/03
Report on elevated CO <sub>2</sub> levels - Perimeter Borehole Gas Trigger Levels dated 1 March 2005	All	02/03/05
Revised drawing ESID 6. Entitled "ESID 6, Revision A, dated 27/12/2006".	All	27/12/06
Groundwater control and trigger levels Marlstone Rock Formation – Colsterworth Landfill site Aug 2005 submitted in accordance with improvement conditions 1 & 2.	All (except BH01 deep)	Aug 2005

**Table S1.2 Operating techniques**

<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Variation Application EPR/BV14371B/V008	Appendix A – excluding section 3.2, Emissions to groundwater and Table S4.5 – Landfill Gas in external monitoring boreholes – limits and monitoring requirements.	02/04/2014

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
2a	The Operator shall submit for Agency approval, proposals for the installation, location and design of additional groundwater monitoring boreholes within the Marlstone Rock Formation, unless the HRA review undertaken in compliance with condition 3.2.4 indicates that monitoring of the Marlstone Rock Formation is not necessary and the Agency has given written approval.	Completed
2b	The operator shall in accordance with the agreed proposals submitted in compliance with improvement condition 2a, install the additional groundwater monitoring boreholes. (if required).	Completed
3c	This review must be based on at least twelve sets of groundwater quality monitoring data collected from each borehole at least over a one-year period. From this data the operator shall derive, for each of the down-gradient groundwater monitoring boreholes, specific groundwater control and trigger levels for those parameters specified in Table S4.4.	Completed
3	Containment Engineering	Now specified as a pre-operational condition see Table S1.4 reference 1.
4	Groundwater Drainage System	Now specified as a pre-operational condition see Table S1.4 reference 1.

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
5a	<p>The operator shall submit to the Agency a report on the collection efficiency of the existing surface water management system prior to the confluence with the groundwater system. The report should, as a minimum, determine whether the existing surface water management system is effective and operating as designed. In the event that investigation demonstrates that the collection efficiency of the existing surface water management system is not effective or operating as designed, the operator shall review the design of the surface water system and submit remedial proposals for Agency approval.</p> <p>The operator shall submit for Agency approval a Surface Water Monitoring and Management Plan which provides full details of the proposed design of the surface water system to separate the groundwater interception/collection system and surface water collected from capping or temporary capping of waste body. The plan shall also include:-</p> <ul style="list-style-type: none"><li>• Monitoring Procedures and Schedules (including a monitoring regime, which monitors both systems prior to their confluence):</li><li>• Assessment criteria:</li><li>• Contingency Action plans:</li><li>• A detailed monitoring plan showing the locations of surface water monitoring points:</li><li>• Maintenance programme which shall specify repair timescales:</li><li>• Remedial proposals agreed in accordance with improvement condition 5a (if any).</li></ul>	Completed
6a	<p>The operator shall submit for Agency approval construction and location proposals for the retro-drilling of leachate monitoring wells remote from leachate extraction points within Phases 1, 2, 3 &amp; 4 based on a minimum of two wells per cell.</p>	Completed
6b	<p>The operator shall install leachate-monitoring wells within each cell in accordance with the approved construction proposal submitted in accordance with improvement condition 6A.</p>	Completed

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
6c	<p>The operator shall submit for Agency approval a leachate management plan which provides full details of the proposed method of leachate management and monitoring, and include proposals for a compliance level with full justification.</p> <p>The leachate management plan shall also define:</p> <ol style="list-style-type: none"><li>Where current leachate levels fail to comply with the agreed compliance levels the plan shall define the method by which the leachate levels will be reduced to achieve compliance across the entire site.</li><li>For areas where leachate levels are required to be reduced interim annual compliance levels shall be derived, proposed and agreed.</li></ol> <p>Once agreed, the levels shall be monitored and reported at the frequency specified in Table S3.1 to demonstrate that the projected improvements are being delivered. If the report demonstrates that the projected improvements are not being delivered then the plan shall be revised and implemented accordingly.</p>	Completed
7	<p>The operator shall submit for Agency approval a revised Landfill Gas Management Plan which shall include:</p> <ul style="list-style-type: none"><li>Monitoring Procedures and Schedules:</li><li>Assessment criteria:</li><li>Contingency Action plans:</li><li>Borehole and gas extraction well construction, completion and design:</li><li>A detailed monitoring plan showing the locations of perimeter landfill</li><li>gas boreholes and gas extraction wells within the landfill body:</li><li>Maintenance programme which shall specify repair and replacement timescales.</li></ul>	Completed
8	<p>The operator shall submit for Agency approval a programme of surface emission testing of methane at the monitoring points listed within Table S4.6 of this permit. This programme shall be devised in accordance with Agency Guidance 'Guidance on the monitoring landfill gas surface emissions', reference LFTGN07.</p>	Completed
9	<p>The operator shall submit for Agency approval a programme of ambient air emission testing of methane and hydrogen sulphide at the installation boundary. This programme shall be devised in accordance with Agency Guidance 'Guidance on the Management of Landfill Gas', reference LFTGN03.</p>	Completed

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
10a	<p>The operator shall submit for Agency approval a revised Groundwater Monitoring Plan which shall include:-</p> <ul style="list-style-type: none"><li>• Investigation into the suitability of the existing groundwater boreholes installed within the Lincolnshire Limestone along the perimeter of the installation:</li><li>• If the investigation shows that the existing groundwater boreholes installed within the Lincolnshire Limestone are not suitable to obtain representative samples of groundwater, then detailed proposals for the construction of purpose built groundwater monitoring wells along the perimeter of the installation shall be submitted:</li><li>• A detailed monitoring plan showing the locations for the proposed additional groundwater boreholes required as a result of the above investigation:</li><li>• Review of historical monitoring data obtained from the existing groundwater boreholes installed within the Lincolnshire Limestone. From this data the operator shall derive, for the down-gradient groundwater monitoring boreholes BH3/90, BH5/90, BH8/91, BH9/91, BH13/93, specific groundwater control and trigger levels for selected parameters specified in Table S4.10</li></ul>	Completed
10b	<p>The operator shall in accordance with the agreed proposals submitted in compliance with improvement condition 10a, install the additional groundwater monitoring boreholes.</p>	Completed
10c	<p>The Operator shall compile into a report for Agency approval a review of monitoring data obtained from the additional boreholes installed in accordance with improvement condition 10b.</p> <p>This review must be based on at least twelve sets of groundwater quality monitoring data collected from each borehole at least over a one year period. From this data the operator shall derive, for all down-gradient groundwater monitoring boreholes, specific groundwater control and trigger levels for selected parameters specified in Table S4.10.</p>	Completed
11	<p>The operator shall submit for Agency approval a Bird Hazard Management Plan which details the specific bird control techniques to be employed at the installation, that will minimise the presence of scavenging birds within the installation boundary.</p>	Completed
12	<p>The operator shall install appropriate monitoring infrastructure at the surface water/groundwater discharge monitoring point GWdislag3 drawing ESID 6 Revision A dated 27/12/06, sufficient to undertake monitoring of the parameter specified with S4.3.</p>	Completed

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
13	<p>The Operator shall submit a written leachate management plan to the Environment Agency for approval. The plan must contain:</p> <ul style="list-style-type: none"><li>• details of the steps that will be taken to achieve full compliance with the 105m (AOD) leachate level compliance limit across the permitted installation in accordance with Environment Agency document LFTGN02;</li><li>• a timescale for achieving compliance with the leachate level compliance limit and a planned date for full compliance;</li><li>• a commitment to provide a progress update towards compliance on a six monthly basis from the date of Environment Agency approval;</li><li>• confirmation that the plan will be implemented as approved and from the date stipulated by the Environment Agency.</li></ul>	Completed
14	<p>The Operator shall submit to the Agency for written approval a review of perimeter landfill gas monitoring borehole spacing along the Northern boundary of the landfill site. The review shall be undertaken in accordance Agency Guidance LFTGN03 'Guidance on the Management of Landfill Gas) and shall include the following:</p> <ul style="list-style-type: none"><li>a) identify if any additional boreholes are required along the northern boundary;</li><li>b) contain a CQA plan for the installation of the boreholes and</li><li>c) contain timeframes for the installation of additional boreholes.</li></ul> <p>One approved, the Operator shall install all additional boreholes within the timeframes specified in the review and to the agreed standards.</p>	6 months

**Table S1.4 Pre-operational measures for future development**

Reference	Operation	Pre-operational Measures
1	Sidewall liner construction in cells 1-4	<p>Prior to sidewall liner construction in cells 1-4, the design of the agreed sidewall shall be updated to incorporate the following:</p> <ul style="list-style-type: none"><li>• The addition of an independent groundwater diversion scheme that can be activated as a means of preventing a groundwater head building up behind the liner. In accordance with the Environment Agency letter dated 20th October 2006 the proposed groundwater management plan should be produced to the satisfaction of the Environment Agency by a date agreed in writing with the Environment Agency.</li><li>• Provision for physically testing the groundwater diversion system to be included in the Construction Quality Assurance (CQA) plan.</li><li>• The methodology for the sub-grade testing to be agreed with the Environment Agency and then included within the CQA plan.</li></ul> <p>No waste shall be placed against the sidewall until the CQA validation report has been submitted and approved by the Environment Agency, unless otherwise agreed in writing.</p>

**Table S1.5 Annual waste input limits**

Category	Limit Tonnes/ Year
Non-hazardous waste	The accumulative quantity of any category of waste shall not exceed the specified annual limit.
Inert waste	
Total annual limit	150,000



## Schedule 2 - List of permitted wastes

**Table S2.1 Permitted waste types**

Waste code	Description
<b>01</b>	<b>WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS</b>
<b>01 01</b>	<b>wastes from mineral excavation</b>
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
<b>01 03</b>	<b>wastes from physical and chemical processing of metalliferous minerals</b>
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 07
<b>01 04</b>	<b>wastes from physical and chemical processing of non-metalliferous minerals</b>
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 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
<b>01 05</b>	<b>drilling muds and other drilling wastes</b>
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
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 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 01 10	waste metal
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
<b>02 03</b>	<b>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</b>
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

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
<b>02 04</b>	<b>wastes from sugar processing</b>
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
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
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
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
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
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
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
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
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
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
<b>04</b>	<b>WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES</b>
<b>04 01</b>	<b>wastes from the leather and fur industry</b>
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
<b>04 02</b>	<b>wastes from the textile industry</b>
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	dye-stuffs and pigments other than those mentioned in 04 02 16

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
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
<b>05</b>	<b>WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL</b>
<b>05 01</b>	<b>wastes from petroleum refining</b>
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
<b>05 06</b>	<b>wastes from the pyrolytic treatment of coal</b>
05 06 04	waste from cooling columns
<b>05 07</b>	<b>wastes from natural gas purification and transportation processes</b>
05 07 02	wastes containing sulphur
<b>06 03</b>	<b>wastes from the MFSU of salts and their solutions and metallic oxides</b>
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
<b>06 05</b>	<b>sludges from on-site effluent treatment</b>
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
<b>06 06</b>	<b>wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation</b>
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
<b>06 09</b>	<b>wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>
06 11 01	calcium-based reaction wastes from titanium dioxide production
<b>06 13</b>	<b>wastes from inorganic chemical processes not otherwise specified</b>
06 13 03	carbon black
<b>07</b>	<b>WASTES FROM ORGANIC CHEMICAL PROCESSES</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres preserving agents (except 03 02) and other biocides</b>
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	wastes containing silicones other than those mentioned in 07 02 16
<b>07 03</b>	<b>wastes from the MFSU of organic dyes and pigments (except 06 11)</b>
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
<b>07 04</b>	<b>wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood</b>
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals<sup>1</sup> excluding waste medicinal products and pharmaceutically active waste materials arising from their manufacture</b>
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

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics</b>
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
<b>07 07</b>	<b>wastes from the MFSU of fine chemicals and chemical products not otherwise specified</b>
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
<b>08</b>	<b>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS</b>
<b>08 01</b>	<b>wastes from MFSU and removal of paint and varnish</b>
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
<b>08 02</b>	<b>wastes from MFSU of other coatings (including ceramic materials)</b>
08 02 01	waste coating powders
08 02 02	aqueous sludges containing ceramic materials
<b>08 03</b>	<b>wastes from MFSU of printing inks</b>
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
<b>08 04</b>	<b>wastes from MFSU of adhesives and sealants (including waterproofing products)</b>
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
<b>09</b>	<b>WASTES FROM THE PHOTOGRAPHIC INDUSTRY</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
<b>10</b>	<b>WASTES FROM THERMAL PROCESSES</b>
<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
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
<b>10 02</b>	<b>wastes from the iron and steel industry</b>
10 02 01	wastes from the processing of slag

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
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
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
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
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
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
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
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

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>wastes from casting of ferrous pieces</b>
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
<b>10 10</b>	<b>wastes from casting of non-ferrous pieces</b>
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
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
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
<b>10 12</b>	<b>wastes from manufacture of ceramic goods, bricks, tiles and construction products</b>
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
10 13 14	waste concrete and concrete sludge
<b>11</b>	<b>WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)</b>
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
<b>11 05</b>	<b>wastes from hot galvanising processes</b>
11 05 01	hard zinc
11 05 02	zinc ash
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
<b>16 03</b>	<b>off-specification batches and unused products excluding waste medicinal products and pharmaceutically active waste materials arising from their manufacture</b>
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
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
<b>16 06</b>	<b>batteries and accumulators</b>
<b>16 08</b>	<b>spent catalysts</b>
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
<b>16 11</b>	<b>waste linings and refractories</b>
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
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
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
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	wood
17 02 02	glass
17 02 03	plastic
<b>17 03</b>	<b>bituminous mixtures, coal tar and tarred products</b>
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
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
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
<b>17 09</b>	<b>other construction and demolition wastes</b>
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03



**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 04	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)
18 01 07	chemicals other than those mentioned in 18 01 06
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 06	chemicals other than those mentioned in 18 02 05
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
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
<b>19 03</b>	<b>stabilised/solidified wastes</b>
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
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 01	vitrified waste
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
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
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
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
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
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
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous 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
<b>19 11</b>	<b>wastes from oil regeneration</b>
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
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
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets

**Table S2.1 Permitted waste types**

<b>Waste code</b>	<b>Description</b>
20 03 03	street-cleaning residues
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	bulky waste

## Schedule 3 – Emissions and monitoring

**Table S3.1 Leachate level limits and monitoring requirements**

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring method
LCP1A, LMP1A, LMP1B, LCP2A, LMP2A, LMP2B, Cell 3 Sump-R, LMP3A, LMP3B, LCP4A, LMP4A, LMP4B	105 mAOD	Monthly	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'.

**Table S3.2 Point source emissions to air – emission limits and monitoring requirements**

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Engine 1 and Engine 2	Oxides of Nitrogen	Gas utilisation plant	650 mg/m <sup>3</sup>	Hourly mean	Annually	As per M2 (Version 10. Oct 2013)
	CO		1500mg/m <sup>3</sup>			
	Total VOCs		1750mg/m <sup>3</sup>			
Engine 3 and Engine 4	Oxides of Nitrogen	Gas Utilisation Plant	500 mg/m <sup>3</sup>	Hourly Mean	Annually	As per M2 (Version 10. Oct 2013)
	CO		1400 mg/m <sup>3</sup>			
	Total VOCs		1000 mg/m <sup>3</sup>			
Landfill gas flare	Oxides of Nitrogen	Landfill Gas Flares	150 mg/m <sup>3</sup>	Hourly mean	Annually*	As per M2 (Version 10. Oct 2013)
	CO		50 mg/m <sup>3</sup>			
	Total VOCs		10 mg/m <sup>3</sup>			

\* Annual monitoring is only required when flares operate in excess of 10% of the time, taken on an annual assessment period.

**Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements**

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Surface	Rate	Surface	50 l/s	Spot sample	Monthly	In accordance

**Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements**

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
water/ groundwater discharge monitoring point Discharge Lagoon 3	Suspended Solids	water	30 mg/l			with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'
	Ammoniacal nitrogen		1 mg/l			
	Oils and grease		None visible			

**Table S3.4 Trigger levels for emissions into groundwater and monitoring requirements**

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
BH 01/04	Chloride	150 mg/l	Spot Sample	Quarterly	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'
	Ammoniacal Nitrogen	0.39 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	0.1 µg/l			
BH 02/09	Chloride	615 mg/l	Spot Sample	Quarterly	
	Ammoniacal Nitrogen	0.39 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	0.1 µg/l			
BH 03/09	Chloride	150 mg/l	Spot Sample	Quarterly	
	Ammoniacal Nitrogen	0.39 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	0.15 µg/l			
BH 04/09	Chloride	150 mg/l	Spot Sample	Quarterly	
	Ammoniacal Nitrogen	0.39 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	1.12 µg/l			
BH05/09	Chloride	150 mg/l	Spot Sample	Quarterly	
	Ammoniacal Nitrogen	0.39 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	0.36 µg/l			
BH 03/90	Chloride	150 mg/l	Spot Sample	Quarterly	
	Ammoniacal Nitrogen	1.17 mg/l			
	Cadmium (Diss)	0.001mg/l			
	Mecoprop	0.21 µg/l			

**Table S3.5 Landfill gas in external monitoring boreholes – limits and monitoring requirements**

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
BHC/94, BH D/94 DP, BH07/93, BH08/93, BH07/90, BH01/04, BH01/90, BH03/90, BH05/90, BH08/91, BH09/91, BH13/93	Methane	1 %v/v	Monthly	As per LFTGN 07 (version 2. 2010)
	Oxygen	-		
	Atmospheric pressure	-		
	Differential Pressure	-		
	Temperature	-		
	Meteorological data	-		
BH C/94, BH D/94 DP, BH01/90, BH05/90, BH07/90, BH07/93	Carbon Dioxide	2 %v/v		
BH03/90, BH13/93		2.5 %v/v		
BH09/91		3.0 %v/v		
BH01/04		4.0 %v/v		
BH08/93		4.5 %v/v		
BH08/91		5.0 %v/v		

**Table S3.6 Landfill gas from capped surfaces – limits and monitoring requirements**

Monitoring point Ref. /description	Parameter	Limit (including unit)	Monitoring frequency	Monitoring Standard or method
Permanently capped zone	Average methane flux and total methane emission	Average zone emission rate of 0.001 mg/m <sup>2</sup> /second	Annually	As per LFTGN 07 (version 2. 2010)*
Temporarily capped zone	Average methane flux and total methane emission	Average zone emission rate of 0.1 mg/m <sup>2</sup> /second	Annually	As per LFTGN 07 (version 2. 2010)*

\* If a cap has previously been shown compliant and there have been no significant physical changes in the gas management during the year, a detailed walkover survey can be used to demonstrate that the surface emissions are under control. If this survey shows no change in the pattern of methane emission, it may be used as the annual survey. The values for flux and total methane emissions measured in the previous year may be reported and a fresh flux box survey is not necessary. If the zone remains stable, the results of a full walkover survey may be accepted as the site report for a period of four years before a further quantitative flux box survey is required

**Table S3.7 Landfill gas – other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Individual gas extraction wellheads or manifolds.	Methane, Carbon Dioxide, Oxygen, Atmospheric pressure, Differential pressure, Balance Gas, Carbon Monoxide, Meteorological Data	Monthly	In accordance with LFTGN04, May 2010.	Where the Oxygen level exceeds 5% or where the addition of the Carbon Dioxide and Methane percentages is less than 80%, an assessment of air ingress into the system shall be undertaken
Input to Flare and/or Engine	Methane Carbon Dioxide Oxygen Balance Gas Gas flow rate	Continuous	In accordance with Environment Agency guidance	Where the Oxygen level exceeds 5% or where the addition of the Carbon Dioxide and Methane percentages is less than 80%, an assessment of air ingress into the system shall be undertaken
Input to Flare and/or Engine	Trace gas analysis in accordance with LFTGN04.	Annually	In accordance with Environment Agency guidance	

**Table S3.8 Leachate– other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
LCP1a, LCP2a, Cell 3 Sump-R, LCP4a	Hazardous Substances Suite	Annually	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'	None
LCP1a, LCP2a, Cell 3 Sump-R, LCP4a	Arsenic, Cadmium, Ammoniacal Nitrogen, Nickel, Copper, Zinc, Lead, Chloride, Potassium, Iron, Total Alkalinity, Magnesium, Sulphate, pH, Conductivity, Calcium, Sodium, Chromium, Manganese, BOD, COD, Base of Monitoring Point	Quarterly	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'	

**Table S3.9 Surface water – other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Header Lagoon, Discharge Lagoon 3	pH, Electrical Conductivity, Chloride, Ammoniacal Nitrogen, Suspended Solids, Visual oil and grease	Monthly	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'	None

**Table S3.10 Groundwater – other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
BH07/01, BH07/02, BH07/03, BH01/09, BH02/09, BH03/09, BH04/09, BH05/09, BH06/09, BH07/09, BH08/09, BH5/90, BH3/90, BH01/04	Water Level, Electrical Conductivity, pH, Chloride, Ammoniacal-N, Cadmium, Mecoprop	Quarterly	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'	None
BH07/01, BH07/02, BH07/03, BH01/09, BH02/09, BH03/09, BH04/09, BH05/09, BH06/09, BH07/09, BH08/09, BH5/90, BH3/90, BH01/04	Total Alkalinity, Magnesium, Potassium, Sulphate, Calcium, Sodium, Chromium, Copper, Iron, Lead, Nickel, Zinc, Manganese	Annually	In accordance with Environment Agency document LFTGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'	None
BH01/09, BH02/09, BH03/09, BH04/09, BH05/09, BH3/90	Targeted Hazardous Substance suite based on leachate	Every 2 years		



## Schedule 4 - Reporting

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

**Table S4.1 Reporting of monitoring data**

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Leachate levels As required by condition 3.5.1	LCP1A, LMP1A, LMP18, LCP2A, LMP2A, LMP2B, Cell 3 Sump-R, LMP3A, LMP3B, LCP4A, LMP4A, LMP4B	Every 3 months	01/02, 01/05, 01/08, 01/11
Emissions to air Parameters as required by condition 3.5.1	1N, 2N, 3N, 4R  Landfill Gas Flare	Every 12 months  Every 12 months	01/01  01/01
Emissions to water Parameters as required by condition 3.5.1	Monitoring point, Discharge Lagoon 3	Every 3 months	01/02, 01/05, 01/08, 01/11
Groundwater Parameters as required by condition 3.5.1	BH01/04, BH02/09, BJ03/09, BH04/09, BH05/09, BH09/90	Every 3 Months	01/02, 01/05, 01/08, 01/11
Landfill gas lateral migration Parameters as required by condition 3.5.1	BHC/94, BHD/94, BH7/93, BH8/93, BH7/90, BH01/04, BH1/90, BH3/90, BH5/90, BH8/91, BH13/93	Every 3 months	01/02, 01/05, 01/08, 01/11
Landfill gas surface emissions Parameters as required by condition 3.5.1	Permanently and Temporarily capped areas	Every 12 months	01/01
Other Landfill gas monitoring Parameters as required by condition 3.5.1	Individual gas extraction wellheads of manifolds  Input to Flare and/or Engine	Every 3 months  Every 12 months	01/02, 01/05, 01/08, 01/11
Other leachate monitoring Parameters as required by condition 3.5.1	LCP1a, LCP2a, Cell 3 Sump-R, LCP4a	Every 3 months	01/02, 01/05, 01/08, 01/11
Hazardous substances Screen		Every 12 months	01/01
Other surface water monitoring Parameters as required by condition 3.5.1	Header Lagoon, Discharge Lagoon 3.	Every 3 months	01/02, 01/05, 01/08, 01/11
Other groundwater monitoring Parameters as required by condition 3.5.1	BH07/01, BH07/02, BH07/03, BH01/09, BH02/09, BH03/09, BH04/09, BH05/09, BH06/09, BH07/09, BH08/09, BH5/90, BH3/90, BH01/04,	Every 3 months  Every 12 months	01/02, 01/05, 01/08, 01/11

**Table S4.1 Reporting of monitoring data**

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Targeted hazardous substances suite	BH01/09, BH02/09, BH03/09, BH04/09, BH05/09, BH3/90	Every 2 years	01/01

**Table S4.2: Annual production/treatment**

Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant; Recirculated into the waste mass.	Cubic metres/year
Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year
Landfill gas: combustion in flares; combustion in gas engines; Other methods of gas utilisation.	Normalised cubic metres/year

**Table S4.3 Performance Parameters**

Parameter	Frequency of assessment	Annual total	Unit
Energy used (including for leachate treatment)	Annually		MWh of electricity

**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	24/07/14
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	24/07/14
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	24/07/14
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	24/07/14
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	24/07/14
Waste Return	Waste Return Form RATS2E	--
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	--

## Schedule 5 - Notification

This page outlines the information that the operator must provide.

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

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

### Part A

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

**(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution**

**To be notified within 24 hours of detection**

Date and Time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

### Part B to be supplied as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator

## Schedule 6 - Interpretation

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

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

*“annually”* means once every year.

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

*“Background concentration”* means such concentration of that substance as is present in:

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

*“Cell layout drawing”* means:

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

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

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

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;

- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliances and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

“*emissions to land*” includes emissions to groundwater.

“*EP Regulations*” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

“*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.

“*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.

“*Medicinal product*” means any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) of 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.

*“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.

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

*“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.

*“Waste code”* means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

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

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

*“year”* means calendar year ending 31 December.

# Schedule 7 - Site plan

Installation boundary plan



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END OF PERMIT



Permit Number:           EPR/BV1437IB                           Operator:               Lincwaste Limited  
 Facility:                    Colsterworth Landfill                           Form Number:        Air1 / 24/07/14

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

Emission							
Emission Point	Substance / Parameter	Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....  
 (Authorised to sign as representative of Operator)

Date.....

Permit Number:   EPR/BV1437IB                                   Operator:            Lincwaste Limited  
 Facility:            Colsterworth Landfill                           Form Number:       Water1 / 24/07/14

**Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY to DD/MM/YYYY**

Emission							
Emission Point	Substance / Parameter	Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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

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

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

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

Signed .....  
 (Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BV1437IB

Operator: Lincwaste Limited

Facility: Colsterworth Landfill

Form Number: Energy1 / 24/07/14

### Reporting of Energy Usage for the year 2014

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

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

Operator's comments :

Signed .....  
(Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BV1437IB

Operator: Lincwaste Limited

Facility: Colsterworth Landfill

Form Number: Leachate 1 / 24/07/14

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

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....  
(Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BV1437IB

Operator: Lincwaste Limited

Facility: Colsterworth Landfill

Form Number: Groundwater1 / 24/07/14

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

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....  
(Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BV14371B

Operator: Lincwaste Limited

Facility: Colsterworth Landfill

Form Number: LFG1 / 24/07/14

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

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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

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

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

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

Signed .....  
(Authorised to sign as representative of Operator)

Date.....