

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Biffa Waste Services Limited

Biffa Waste Services Ltd Redhill Landfill Site Cormongers Lane Nutfield Redhill Surrey RH1 4ER

Variation application number

EPR/BU8126IY/V018

Consolidated permit number

EPR/BU8126IY

Biffa Waste Services Ltd Permit number EPR/BU8126IY

Introductory note

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

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

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made.

The variation authorises the operation of an asbestos picking station adjacent to the existing soil treatment facility located within Redhill Landfill Site. This will permit the handpicking of identifiable pieces of bonded asbestos from waste soils. The variation also includes the addition of EWC 19 01 11* Bottom ash and slag containing hazardous substances for disposal into the non-reactive hazardous cell.

We have also removed some unnecessary wording from the permit and reintroduced a Standard Rules set SR2010No12 which was removed from the permit in error during a previous permit variation.

The schedules specify the changes made to the permit.

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

status log of permit A: EPR/BU8126IY (NEQ)			
Description	Date	Comments	
Application received EPR/BU8126IY/A001	09/06/2003	Application for the North East Area of installation.	
Response to request for information regarding commercial confidentiality	18/07/2003		
Response to request for information regarding technical information – North East Quadrant	01/11/2003		
Permit determined EPR/BU8126IY (Billing reference: BU8126IY)	03/03/2004		
Planning Inspectors decision	08/02/2006		
Variation determined EPR/BU8126/V002 (Billing reference: KP3534LQ)	12/10/2006		
Variation application EPR/BU8126IY/V003	Duly made 27/04/2007		
Response to request for information Schedule 7 Notice dated 23/11/2007	18/01/2008		
Variation determined (Billing reference: AP3838UC)	07/04/2008		
Variation determined EPR/BU8126IY/V004 (Billing reference: YP3639UH)	04/12/2008		
Variation determined EPR/BU8126IY/V005 (Billing reference: AP3338US)	31/03/2009		
Variation determined EPR/BU8126IY/V006 (Billing reference: AP3132HY)	15/07/2010		
Variation application EPR/BU8126IY/V007	Duly made 22/06/2011		
Variation determined (Billing reference: RP3832HM)	28/11/2011		
Variation application EPR/BU8126IY/V008	Duly made 03/10/2011		
Variation determined (Billing reference: TP3936FN)	06/02/2012		
Variation application EPR/BU8126IY/V009	Duly made 30/05/2012		
Variation determined (Billing reference: KP3236CC)	22/08/2012		
Variation application EPR/BU8126IY/V010	Duly made 22/02/2013	Application to vary permit to include waste code.	

Variation determined (Billing reference: KP3137ZF)	20/03/2013	Varied permit issued.
Agency variation determined EPR/BU8126IY/V011 (Billing reference: ZP3839NK)	29/05/2013	Agency variation to implement the changes introduced by IED.
Application received EPR/BU8126IY/V012 (variation and consolidation)	Duly made 28/10/2013	Application to vary and update the permit to modern conditions.
Variation determined (Billing reference: NP3632NS)	04/06/2014	Varied and consolidated permit issued in modern condition format.
Application EPR/BU8126IY/V013	Duly made 24/04/2015	Application to add the EWC codes 01 04 07* and 01 04 08.
Environment Agency Landfill Sector Review 2015 Permit reviewed Variation determined EPR/BU8126IY/V013 (Billing reference: TP3336AY)	10/06/2015	Varied and consolidated permit issued in modern condition format. Including application EPR/BU8126IY/V013 (which would have been EPR/BU8126IY/V014) to add the EWC code 01 04 07* and 01 04 08.
Application received EPR/BU8126IY/V015 (variation and consolidation)	Duly made 08/01/2016	Application to vary the permit (to introduce a qualitative waste acceptance description for the soil treatment facility) and to consolidate with permit EPR/JB3332RV (EAWML 104457).
Variation determined (Billing reference: LP3134RJ)	29/03/2016	Varied and consolidated permit issued.
Application EPR/BU8126IY/V018 (variation and consolidation with EPR/BV2263IW)	Duly made 17/02/2017	Application to vary and update consolidate the permit to modern conditions.
Variation determined EPR/BU8126IY (Billing reference: HP3032DJ)	26/04/2017	Varied and consolidated permit issued in modern condition format.
Application received EPR/BU8126IY/V017 (variation and consolidation)	Duly Made 24/08/2017	Application to vary and update consolidate the permit to modern conditions.
Variation determined EPR/BU8126IY (Billing reference: RP3733JX)	27/10/2017	Varied and consolidated permit issued.
Application EPR/BU8126IY/V018 (variation and consolidation)	Duly made 26/07/2019	Application to vary the permit (to add an asbestos picking station) add waste codes and include SR2010No12 (previously permitted but removed in error)
Additional information received	22/10/2019	Schedule 5 response.
Additional information received	13/12/2019	Alternative operating techniques proposed.
Variation determined EPR/BU8126IY	12/02/2020	Varied and consolidated permit issued.

Status log of permit B: EPR/BV2	263IW (SWA)	
Description	Date	Comments
Application received EPR/BV2263IW/A001	Duly made 06/06/2003	Application for South West Area of installation.

Status log of permit B: EPR/BV2	Status log of permit B: EPR/BV2263IW (SWA)			
Description	Date	Comments		
Response to request for information regarding commercial confidentiality	18/07/2003			
Permit determined EPR/BV2263IW (Billing reference: BV2263IW)	03/03/2004	Original permit issued to Biffa Waste Services Limited.		
Planning Inspector's decision	08/02/2006			
Variation determined EPR/BV2263IW/V002 (Billing reference: KP3234LW)	12/10/2006			
Variation determined EPR/BV2263IW/V003 (Billing reference: AP3638UK)	14/08/2008			
Variation determined ERP/BV2263IW/V004 (Billing reference: YP3539UK)	04/09/2008			
Agency variation determined EPR/BV2263IW/V005 (Billing reference: EP3835NL)	29/05/2013	Agency variation to implement the changes introduced by IED.		
Variation Application EPRBV2263IW/V006	Duly made 29/05/2013			
Variation determined EPR/BV2263IW (Billing reference: JP3539NH)	06/06/2013	Changes to waste tonnages.		
Environment Agency Landfill Sector Review Permit reviewed Variation determined EPR/BU8126IY/V018 Permit EPR/BU8126IY (Billing reference: VP3834RJ)	11/02/2016	Varied and consolidated permit issued in modern condition format.		
Application EPR/BV2263IW/V008 (consolidation with EPR/BU8126IY)	Duly made 17/02/2017	Application to consolidate with EPR/BU8126IY.		
Variation determined EPR/BU8126IY (Billing reference: HP3832DN)	26/04/2017	Permit consolidated with permit EPR/BU8126IY. Permit EPR/BV2263IW and billing cease.		

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/BU8126IY

Issued to

Biffa Waste Services Limited ("the operator")

whose registered office is

Coronation Road Cressex High Wycombe Bucks HP12 3TZ

company registration number 00946107

to operate a regulated facility at

Redhill Landfill Site Cormongers Lane Nutfield Redhill Surrey RH1 4ER

to the extent set out in the schedules.

The notice shall take effect from 12/02/2020.

Under regulation 27(2) of the Regulations, standard rules SR2010No12 are conditions of this permit.

Name	Date
Tracey Pollard	12/02/2020

Authorised on behalf of the Environment Agency

Schedule 1 – changes in the permit

All conditions have been varied by the consolidated permit EPR/BU8126IY/V018

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BU8126IY

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BU8126IY/V018 authorising,

Biffa Waste Services Limited ("the operator"),

whose registered office is

Coronation Road Cressex High Wycombe Bucks HP12 3TZ

company registration number 00946107

to operate an installation at

Redhill Landfill Site Cormongers Lane Nutfield Redhill Surrey RH1 4ER

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

Under regulation 27(2) of the Regulations, standard rules SR2010No12 are conditions of this permit.

Name	Date
Tracey Pollard	12/02/2020

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

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

1.2 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 3 March 2004 (as may be varied by a Deed of Variation from time to time) shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
 - (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 1.2.1; and
 - (c) the estimated costs for the closure and aftercare of the landfill.

1.3 Energy efficiency

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

1.4 Efficient use of raw materials

- 1.4.1 The operator shall:
 - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
 - (b) maintain records of raw materials and water used in the activities;

- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

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

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

2 **Operations**

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2a and S1.2b, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2a and S1.2b or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.4 Improvement programme

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

2.5 **Pre-operational conditions**

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

2.6 Landfill Engineering

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

2.7 Waste acceptance

- 2.7.1 Wastes shall only be accepted for disposal if:
 - (a) they are listed in schedule 2, table S2.1 or S2.2; and

- (b) they are non- hazardous waste or asbestos and construction materials containing asbestos or stable, non reactive hazardous wastes, and
- (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm), and
- (d) they are not shredded used tyres, and
- (e) they are not liquid waste (including waste waters but excluding sludge), and
- (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
- (g) all the relevant waste acceptance procedures have been completed, and
- (h) they fulfil the relevant waste acceptance criteria, and
- (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
- (j) they are wastes which have been treated, except for: inert wastes for which treatment is not technically feasible; or it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment, and
- (k) they are wastes with a code beginning with 07 05 and 16 03, they shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture.
- 2.7.2 For the following activities referenced in schedule 1, table S1.1, A3 and A4. Waste shall only be accepted for treatment if:
 - (a) it is of a type and quantity listed in schedule 2, table S2.4 and S2.5; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.7.3 Wastes shall only be accepted for restoration where:
 - (a) they are listed in schedule 2, table S2.3 and
 - (b) they are accepted in accordance with a restoration plan approved in writing by the Environment Agency.
- 2.7.4 For the following activities referenced in schedule 1, table S1.1, A2, stable non-reactive hazardous waste shall not be deposited in cells used or intended to be used for the disposal of biodegradable non-hazardous waste. Stable non-reactive hazardous waste and non-hazardous waste which is landfilled in the same cell must meet the relevant waste acceptance criteria.
- 2.7.5 For the following activities referenced in schedule 1, table S1.1, A2, asbestos containing wastes and construction materials containing asbestos shall only be disposed of with other suitable wastes and not in cells containing biodegradable non-hazardous waste. Asbestos waste and construction material containing asbestos must meet the relevant waste acceptance criteria and must be covered daily and before each compaction operation with appropriate material.
- 2.7.6 For the following activities referenced in schedule 1, table S1.1, A1 to A2, the operator shall:
 - (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill and waste at the point of deposit; and
 - (b) be satisfied that the waste conforms to the requirements of condition 2.7.1.
- 2.7.7 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.
- 2.7.8 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.7.9 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing R103AK00 and R103BE00.

- 2.7.10 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1, table S1.5.
- 2.7.11 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.
- 2.7.12 The operator shall maintain and implement a system to record the disposal location of any hazardous waste.

2.8 Leachate levels

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

2.9 Closure and aftercare

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

2.10 Landfill gas management

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 The limits in Schedule 3 shall not be exceeded.
- 3.1.2 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.2, S3.3 and S3.6.
- 3.1.3 The limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.
- 3.1.4 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.5 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
 - (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and

(b) between nine and six months prior to every subsequent six years after the fourth anniversary of the granting of the permit.

3.2 Emissions of substances not controlled by emission limits

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

3.3 Odour

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

3.4 Noise and vibration

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

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:
 - (a) Leachate specified in tables S3.1 and S3.11;
 - (b) Point source emissions specified in tables S3.2, S3.3 and S3.6;
 - (c) Groundwater specified in tables S3.4 and S3.9;
 - (d) Landfill gas specified in tables S3.5, S3.8 and S3.10;

- (e) Surface water specified in table S3.12;
- (f) Ambient air specified in table S3.13;
- (g) Particulate matter specified in table S3.7;
- (h) Contaminated soil in relation to the Soil Treatment Facility operations specified in table S3.14 and
- (i) Process monitoring requirements table S3.15.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 A topographical survey of the site referenced to ordnance datum shall be carried out and shall be used to produce a plan of a scale adequate to show the surveyed features of the site:
 - (a) annually, and
 - (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
 - (c) following closure of the landfill or part of the landfill.

3.6 Pests

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

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
 - (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) the results of groundwater monitoring;
 - (ii) sub-surface landfill gas monitoring;
 - (iii) leachate levels, quality and quantities;
 - (iv) landfill gas generation and collection;

- (v) waste types and quantities;
- (vi) the location of hazardous waste deposits; and
- (vii) the specification and as built drawings of the basal, sidewall and capping engineering systems.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year ('the annual report') shall be submitted to the Environment Agency by 31st January each year or such other date as may be agreed in writing by the Agency, with the exception of 4.2.2(c) that must be provided by the end of February each year. The report(s) shall include as a minimum:
 - (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto. The review will include written descriptions of the improvements made to operational performance during the year, action plans developed and planned improvements for the coming year;
 - (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3
 - (c) the annual production/treatment set out in schedule 4 table S4.2;
 - (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
 - the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
 - (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
 - (g) a calculation of the remaining capacity (reported in cubic metres) derived from the presettlement contours and the most recent topographical survey;
 - (h) a plan(s) ('the monitoring and extraction point plan MEPP') showing the locations of existing and any new leachate and landfill gas extraction and all monitoring points.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
 - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) using the forms specified in schedule 4 table S4.4 or other reporting format as agreed in writing with the Environment Agency; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.
- 4.2.5 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report

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

4.3 Notifications

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) in the event of a breach of any permit condition the operator must immediately-
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.4 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 a	Table S1.1 activities (NEQ and SWA)				
Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity	
A1 (NEQ and SWA)	D5 –Specially engineered landfill; R5 ^[1] - the recycling or reclamation of inorganic material and R10 – Land treatment resulting in benefit to agriculture or ecology	Section 5.2 Part A(1) (a), The disposal of waste in a landfill	Landfill for non-hazardous waste and landfill restoration	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.	
A2 (NEQ)	D5: Specially engineered landfill	Section 5.2 Part A(1) (a), The disposal of waste in a landfill	Landfill for hazardous waste Separate Stable non-reactive cell including asbestos	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.	
A3 (NEQ)	R5: Recycling/reclamation of other inorganic compounds	Section 5.3 Part A(1)(a)(i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day by biological treatment	Biological treatment of contaminated soils	Treatment of contaminated soils, consisting of the types specified in condition 2.7.	

Table S1.1 activities (NEQ and SWA)				
Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A4 (NEQ)	D9:Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12	Section 5.3A(1)(a)(ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment	Asbestos removal from soils	 From receipt of hazardous waste through to storage of treated waste prior to being subject to bioremediation or sent off-site for disposal. Treatment consisting only of hand picking of identifiable pieces of bonded asbestos from waste soils in a dedicated enclosed picking line. All treatment and storage shall take place on an impermeable surface with a sealed drainage system within the area highlighted Asbestos Picking Station as shown on drawing number 003 – Submitted with the permit variation application dated 02/04/2019. Waste subject to this process shall only be contaminated with asbestos alone or in combination with hydrocarbons Asbestos removed from the soil shall be double-bagged and stored in a sealed skip.
				Hazardous waste specified in table S2.5

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A5 (NEQ)	D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	S5.6 A(1)(a) The temporary storage of hazardous waste in a facility with a total capacity exceeding 50 tonnes pending any of the activities listed in sections 5.1, 5.2 and 5.3.	Temporary storage of hazardous waste pending treatment or disposal	Asbestos contaminated soil should be stored on an impermeable surface with a sealed drainage system within the area highlighted Asbestos Picking Station as shown on drawing number 003 – Submitted with the permit variation application dated 02/04/2019 in a way that minimises asbestos fibre emissions.
				Subject to any other requirements of this permit wastes shall be stored for no longer than 1 year prior to disposal.
				Hazardous wastes as specified in table S2.4 and S2.5
Note [1] – SV	VA permit area only.			
Directly Ass	ociated Activities			
A4 (NEQ and SWA)	R1: use principally as a fuel to generate energy	-	Pre-treatment and utilisation of landfill gas for energy recovery in an appliance with a rated thermal input < 50MW	Landfill gas arising from the landfill (under permit number EPR/BU8126IY and EPR/BV2263IW).
A5 (NEQ)	D8 – Biological treatment of waste	-	Treatment of leachate in a facility with a capacity of <50 t/day	Leachate arising from the landfill (under permit number EPR/BU8126IY).
A6 (SWA)	D8 – Biological treatment of waste	-	Treatment of leachate in a facility with a capacity of <50 t/day	Leachate arising from the landfill (under permit number EPR/BV2263IW).

Table S1.1 activities (NEQ and SWA)				
Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A7 (NEQ and SWA)	N/A	-	Management of leachate including re-circulation and temporary storage of leachate pre-discharge, and off-site tankering	Leachate arising from the landfill (under permit number EPR/BU8126IY and EPR/BV2263IW).
A8 (NEQ and SWA)	N/A	-	Flaring of landfill gas for disposal in an appliance	Landfill gas arising from the landfill.
A9 (NEQ and SWA)	D6: release to water body except seas/ oceans	-	Discharges of site drainage from the landfill	From surface water and groundwater management system to point of entry to controlled waters.

Table S1.2a Operating techniques (NEQ)				
Description	Parts	Date Received		
Application	The response to questions 1.2, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Forms for 'Patteson Court, North East Quadrant'. The technical details and standards contained within these documents shall apply to the NEQ, save that the Operator shall install on the sides of the engineered containment a leachate drainage layer of not less than 300mm thickness measured perpendicular to the surface of those sides.	09/06/2003		
	The revised Patteson Court Southwest Area Landfill Risk Assessment report by Environmental Simulations International Ltd, dated December 2003, received under cover of letter from applicant dated 12 December 2003 (NEQ and SWA).	12/12/2003		
	The information contained within letters from the applicant dated 26 September 2003, 11 November 2003 and 12 December 2003, which should be considered as part of the Applications (NEQ and SWA).	26/09/2003, 11/11/2003 and 12/12/2003		
Variation application EPR/BU8126IY/V002	The response to questions C2.1, C2.2, C2.3, C2.4, C2.5 and C2.6 of the variation application for Redhill Landfill Site (NEQ) Permit Ref: BU8126IY received under cover letter of applicant dated 30 March 2007.	02/04/2007		

Description	Parts	Date Received	
Schedule 7 Notice	Response to schedule 7 Notice dated 23 November 2007.	18/01/2008	
Operations	Gas Management Plan & Control specification, edition IV, dated November 2007.	11/2007	
	Redhill Landfill Site Odour Management Plan 2011 Approved September 2011.	01/2008	
	Particulate Monitoring and Management Plan	08/2009	
Variation Application	The response to questions C2.1, C2.4, C2.7, C2.9 and associated drawings showing revised pre-settlement contours, contained in Variation application for Redhill Landfill Site North East Quadrant permit reference BU8126IY.	03/03/2007	
	Revised engineering drawing details for interface between the North East Quadrant and the South West Area comprising:		
	Drawing 1 – Interface lining system formation surface – Optimised layout, dated May 2008	07/07/2008	
	Drawing 2 – Details and cross sections, dated April 2008		
Variation Application EPR/BU8126IY/V007	All	22/06/2011	
Operations	Asbestos Management Plan	10/2011	
Response to Schedule 5 Notice Request for additional information (request dated 03/10/2011)	All	20/10/2011	
Variation Application EPR/BU8126IY/V008	Non-Technical Summary	09/09/2011	
Operations	Odour Management Plan	11/2011	
Response to Schedule 5 Notice	Landfill Gas Emissions Assessment and Monitoring	09/11/2011	
Variation application EPR/BU8126IY/V009	Part C2 Section 5c - Non Technical Summary Part C3 Section 3a – Technical standards	30/05/2012	
Response to Schedule 5 Notice dated 22/06/2012	All	29/06/2012	

Description	Parts	Date Received
Further information received	Details of the air extraction from the biopiles Waste codes Details referring to accepting green wastes	19/07/2012
Further information received	VOCs monitoring Details of off spec compost accepted on site Acceptance and storage procedures	03/08/2012
Variation Application EPR/BU8126IY/V010	Non-Technical Summary NTS_833_STF_Feb_2013_ns	22/02/2013
Further information received	Operator confirmed they will operate the soil treatment facility within the requirements of sector guidance note IPPC S5.06	19/03/2013
Variation Application EPR/BU8126IY/V012	Hydrogeological Risk Assessment (Report Reference: 60519R1, October 2013) Non- Technical Summary and Supporting Information NTS_833_04_2013_ns	03/06/2013
Variation Application EPR/BU8126IY/V012	Odour management Plan – 30/09/2011 (reviewed internally 2012 annual review)Surface Water Management Plan – internal only21/07/2012Asbestos Management Plan – 10/10/2011 (reviewed as part of the annual review2012 internal only)Particulate Monitoring and Management Plan –24/01/2013Leachate Management Plan – 12/02/2013Leachate re-circulation Plan – 10/07/2012	03/06/2013
Further information received Variation Application EPR/BU8126IY/V012	Additional information on pre settlement level drawing reference, soil treatment facility waste codes, leachate and surface water monitoring. Redhill Landfill North East Quadrant: HRA review (Report Reference: 6051R1, October 2013).	27/10/2013
Further information received Variation Application EPR/BU8126IY/V012	New leachate monitoring and extraction well locations – As shown on 'NE Quadrant Leachate Infrastructure, drawing no: R1233600', dated 29.01 2014. Landfill Gas Management Plan 2014, Version 4	31/01/2014
Landfill Gas Management Plan	Landfill Gas Management Plan 2014, Version 6	31/01/2014

Table S1.2a Operating techniques (NEQ)		
Description	Parts	Date Received
Odour Management Plan	Redhill Landfill Site Odour Management Plan, 01/2014	01/2014
Operations	Asbestos Management Plan for Asbestos Cells 6&8	05/2014
Variation Application EPR/BU8126IY/V015	Section 2.2 ('Modification to the Soil Treatment Facility') of 'EPVA – Supporting Statement'	09/11/2015
Improvement programme requirement IC13 – Restoration Plan	Document reference '20151023_Redhill_RestorationPlan_IC13_FINAL' Site Restoration Masterplan reference 'R103BE00' Document reference 'DPL/04 Pre-acceptance procedure, waste reception, handling and discharge' Document reference 'DGNL/04 Pre-acceptance and waste reception' Document reference 'STF3 Restoration Soils Risk Assessment, Redhill landfill' (dated March 2010)	13/11/2015
Variation Application EPR/BU8126IY/V015	Confirmation that Cell 7 meets the requirements of Pre-operational Measure PO2.	18/03/2016
Application EPR/BU8126IY/V018	Application form C3 section 3a – technical standards and referenced supporting information	Duly made 26/07/2019
Response to Schedule 5 notice dated 04/09/2019	Response to questions 1, 4, 5, 6, 7 (except the technique of dropping bagged asbestos sheet into the skip), 8, 10, 11 within the Schedule 5 response	22/10/2019
Response to operating technique enquiry and further information request dated 10/12/2019	Response to point 1 waste reception sampling. The operator confirms the first load of each waste stream will be sampled and analysed and then 10% of all other received loads (for each waste stream) will be sampled and analysed.	13/12/2019
	Response to point 2 dropping of asbestos sheet. The operator confirms picked double bagged asbestos cement pieces will be carried to the asbestos skip which will be kept locked except for when being loaded.	

Table S1.2b Operating techniques (SWA)		
Description	Parts	Date Received
Application	The response to questions 1.2, 2.1, 2.2, 2.3, 2.4 and 2.5 in Part B of the Application Forms for 'Patteson Court, South West Area'. The technical details and standards contained within these documents shall apply to the SWA.	06/06/2003
	The revised Patteson Court Southwest Area Landfill Risk Assessment Report by Environmental Simulations International Limited, dated December 2003, received under cover of letter from applicant date 12 December 2003.	12/12/2003
	The information contained within letters from the applicant dated 26 September 2003, 11 November 2003 and 12 December 2003, which should be considered as part of the applications.	26/09/2003, 11/11/2003 and 12/12/2003
Variation Application AP3638UK	The response to questions C2.1, C2.4, C2.7, C2.9 and associated drawings showing revised pre-settlement contours, contained in Variation application for Redhill Landfill South West Area Permit reference BV2263, with the following exclusions;	30/03/2007
	Interface Lining Systems;	
	Drawing 1 Optimised Layout; and	
	Drawing 2 Details and cross sections.	
Operations	Odour Management Plan	November 2011
Landfill Gas Management Plan	Landfill Gas Management Plan 2014, Version 6	31/01/2014
Restoration Plan	Former Improvement Condition 13 (NEQ also SWA) - reference 20151023_Redhill Restoration Plan IC13 FINAL	October 2015

Table S1.3 Improvement programme requirements (NEQ and SWA)		
Reference	Requirement	Date
IP3 (NEQ and SWA)	The Operator shall submit for the approval of the Agency a fully justified review, in writing, of proposed trigger substances for the period after dewatering has stopped and normal and natural groundwater flow conditions have been resumed. All existing relevant data from boreholes that are up gradient boreholes along the eastern boundary (H90/4, H90/7, H96/5B, H98/GWB/20.0, H98/GWA/18.8, H98/GWA/64, H90/6D & H90/8, H90/6S, and the new additional boreholes) shall be used including groundwater compositional and level data and leachate quality data to derive suitable triggers for boreholes that are down gradient boreholes along the west boundary (H90/1, H90/2, H90/3, H90/4, H98/GWB/20.0.	3 months prior to cessation of dewatering / turning off pumps.

Table S1.3 Improvement programme requirements (NEQ and SWA)		
Reference	Requirement	Date
	H98/GWB/23.0, H98/GWC/30, H98/GWC/85, H0501A, H0501B, H0502A, H0502B, H0503A, H0503B, H0504A, H0504B, H0505A, H0505B, H0506A, H0506B, H0507A, H0507B, H0508A, H0508B, H0509A and H0509B).	
	Arsenic, Sulphate and Benzene shall be considered as additional trigger substances to ammoniacal-N, Cl, Ni, K, Cd, mecoprop and tributyltin.	
	On approval by the Agency the triggers shall only be effective commencing when normal and natural flow conditions have resumed after dewatering has stopped.	
IP13 (NEQ)	The operator shall submit to the Environment Agency in writing for approval a restoration plan for the site which includes waste quantities, waste types, and waste acceptance criteria for wastes for restoration.	Completed.
IP8 (SWA)	The Operator shall submit to the Environment Agency in writing for approval, waste acceptance criteria for leachate accepted from offsite.	Within 3 months of the issue of this Permit Variation

Table S1.4 Pre-operational measures (NEQ only)		
Reference	Operation	Pre-operational Measures
PO1	Switching off or reducing groundwater pumping	The Operator shall submit justified proposals in writing to forewarn the Agency the date when dewatering shall cease altogether or be steadily reduced and when normal and natural groundwater flow conditions shall be resumed and the date when the revised groundwater triggers shall apply.
	Leachate level and quality at the base of site or within waste mass	The operator shall not increase the leachate level limit above a 1 metre head for any phase or cell of the site unless the following infrastructure has been installed in compliance with 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water, TGN02' and with written agreement from the Environment Agency:
		 At least two leachate-level monitoring points in addition to a collection sump should be provided for each hydraulically separated cell of less than 5 ha in size.
		These points should be capable of recording the level of leachate in relation to the base of the site.
		Leachate monitoring points should include points remote from the leachate drainage and pumping systems.

Table S1.5 Annual waste input limits (NEQ and SWA)		
Category	Limit Tonnes/ Year	
Inert waste (SWA)	250,000	
Non-hazardous waste (NEQ)	750,000	
Stable, non-reactive hazardous wastes (NEQ)	120,000	
Hazardous waste (Soil treatment facility) (NEQ)	79,999 of which no more than 25,000 tonnes are asbestos contaminated soils	
Waste for restoration (NEQ and SWA)	250,000	
Leachate from offsite accepted at the onsite leachate treatment plant (SWA)	As per Improvement Programme 8 (IP8 SWA), Table S1.3 of the consolidated permit.	
Asbestos contaminated soils (soil treatment facility) (NEQ)	25,000	

Schedule 2 – List of permitted wastes

Table S2.1 Perm	itted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)	
Waste code	Description	
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals	
01 01	wastes from mineral excavation	
01 01 01	wastes from mineral metalliferous excavation	
01 01 02	wastes from mineral non-metalliferous excavation	
01 03	wastes from physical and chemical processing of metalliferous minerals	
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05	
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07	
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 10	
01 04	wastes from physical and chemical processing of non-metalliferous minerals	
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07	
01 04 09	waste sand and clays	
01 04 10	dusty and powdery wastes other than those mentioned in 01 04 07	
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07	
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11	
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07	
01 05	drilling muds and other drilling wastes	
01 05 04	freshwater drilling muds and wastes	
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06	
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06	
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing	
02 01 01	sludges from washing and cleaning	
02 01 02	animal-tissue waste	
02 01 03	plant-tissue waste	
02 01 04	waste plastics (except packaging)	
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site	
02 01 07	wastes from forestry	
02 01 09	agrochemical waste other than those mentioned in 02 01 08	
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin	
02 02 01	sludges from washing and cleaning	

	itted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA	
Waste code	Description	
02 02 02	animal-tissue waste	
02 02 03	materials unsuitable for consumption or processing	
02 02 04	sludges from on-site effluent treatment	
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation	
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation	
02 03 02	wastes from preserving agents	
02 03 03	wastes from solvent extraction	
02 03 04	materials unsuitable for consumption or processing	
02 03 05	sludges from on-site effluent treatment	
02 04	wastes from sugar processing	
02 04 01	soil from cleaning and washing beet	
02 04 02	off-specification calcium carbonate	
02 04 03	sludges from on-site effluent treatment	
02 05	wastes from the dairy products industry	
02 05 01	materials unsuitable for consumption or processing	
02 05 02	sludges from on-site effluent treatment	
02 06	wastes from the baking and confectionery industry	
02 06 01	materials unsuitable for consumption or processing	
02 06 02	wastes from preserving agents	
02 06 03	sludges from on-site effluent treatment	
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)	
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials	
02 07 02	wastes from spirits distillation	
02 07 03	wastes from chemical treatment	
02 07 04	materials unsuitable for consumption or processing	
02 07 05	sludges from on-site effluent treatment	
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard	
03 01	wastes from wood processing and the production of panels and furniture	
03 01 01	waste bark and cork	
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	
03 03	wastes from pulp, paper and cardboard production and processing	
03 03 01	waste bark and wood	
03 03 02	green liquor sludge (from recovery of cooking liquor)	
03 03 05	de-inking sludges from paper recycling	
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard	

Naste code	Description	
03 03 08	wastes from sorting of paper and cardboard destined for recycling	
03 03 09	lime mud waste	
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation	
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10	
04	Wastes from the leather, fur and textile industries	
04 01	wastes from the leather and fur industry	
04 01 01	fleshings and lime split wastes	
04 01 02	liming waste	
04 01 06	sludges, in particular from on-site effluent treatment containing chromium	
04 01 07	sludges, in particular from on-site effluent treatment free of chromium	
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium	
04 01 09	wastes from dressing and finishing	
04 02	wastes from the textile industry	
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)	
04 02 10	organic matter from natural products (for example grease, wax)	
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16	
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19	
04 02 21	wastes from unprocessed textile fibres	
04 02 22	wastes from processed textile fibres	
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal	
05 01	wastes from petroleum refining	
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09	
05 01 13	boiler feedwater sludges	
05 01 14	wastes from cooling columns	
05 01 16	sulphur-containing wastes from petroleum desulphurisation	
05 01 17	bitumen	
05 06	wastes from the pyrolytic treatment of coal	
05 06 04	waste from cooling columns	
05 07	wastes from natural gas purification and transportation	
05 07 02	wastes containing sulphur	
06	Wastes from inorganic chemical processes	
06 03	wastes from the MFSU of salts and their solutions and metallic oxides	
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13	
06 03 16	metallic oxides other than those mentioned in 06 03 15	
06 05	sludges from on-site effluent treatment	
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02	

Waste code	Description	
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes	
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02	
06 09	wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes	
06 09 02	phosphorous slag	
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03	
06 11	wastes from the manufacture of inorganic pigments and opacificiers	
06 11 01	calcium-based reaction wastes from titanium dioxide production	
06 13	wastes from inorganic chemical processes not otherwise specified	
06 13 03	carbon black	
07	Wastes from organic chemical processes	
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals	
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11	
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres	
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11	
07 02 13	waste plastic	
07 02 15	wastes from additives other than those mentioned in 07 02 14	
07 02 17	waste containing silicones other than those mentioned in 07 02 16	
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)	
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11	
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides	
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11	
07 05	wastes from the MFSU of pharmaceuticals	
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11	
07 05 14	solid wastes other than those mentioned in 07 05 13	
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics	
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11	
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified	
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11	
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks	
08 01	wastes from MFSU and removal of paint and varnish	
08 01 12	waste paint and varnish other than those mentioned in 08 01 11	
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13	
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 1	

Table S2.1 Perm	itted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)	
Waste code	Description	
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17	
08 02	wastes from MFSU of other coatings (including ceramic materials)	
08 02 01	waste coating powders	
08 02 02	aqueous sludges containing ceramic materials	
08 03	wastes from MFSU of printing inks	
08 03 07	aqueous sludges containing ink	
08 03 13	waste ink other than those mentioned in 08 03 12	
08 03 15	ink sludges other than those mentioned in 08 03 14	
08 03 18	waste printing toner other than those mentioned in 08 03 17	
08 04	wastes from MFSU of adhesives and sealants (including water proofing products)	
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09	
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11	
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13	
09	Wastes from the photographic industry	
09 01	wastes from the photographic industry	
09 01 08	photographic film and paper free of silver or silver compounds	
09 01 10	single-use cameras without batteries	
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11	
10	Wastes from thermal processes	
10 01	wastes from power stations and other combustion plants (except 19)	
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)	
10 01 02	coal fly ash	
10 01 03	fly ash from peat and untreated wood	
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form	
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form	
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14	
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16	
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18	
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20	
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22	
10 01 24	sands from fluidised beds	
10 01 26	wastes from cooling-water treatment	
10 02	wastes from the iron and steel industry	
10 02 01	wastes from the processing of slag	
10 02 02	unprocessed slag	

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)	
Waste code	Description
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10 [1]	mill scales
10 02 12 [2]	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 04	wastes from lead thermal metallurgy
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 04	other particulates and dust
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 04	other particulates and dust
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	wastes from other non-ferrous thermal metallurgy
10 08 04	particulates and dust

Waste code	Description
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 14	waste binders other than those mentioned in 10 10 13
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust

Waste code	Description
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
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 17 02 05
11 05	wastes from hot galvanising processes
11 05 02	zinc ash
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01	
	ferrous metal dust and particles
12 01 02	
12 01 02 12 01 04	ferrous metal dust and particles
12 01 12 01 02 12 01 04 12 01 05 12 01 13	ferrous metal dust and particles non-ferrous metal dust and particles

Table S2.1 Perm	itted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)	
Waste code	Description	
15 01	packaging (including separately collected municipal packaging waste)	
15 01 02	plastic packaging	
15 01 03	wooden packaging	
15 01 05	composite packaging	
15 01 06	mixed packaging	
15 01 07	glass packaging	
15 01 09	textile packaging	
15 02	absorbents, filter materials, wiping cloths and protective clothing	
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	
16	Wastes not otherwise specified in the list	
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)	
16 01 12	brake pads other than those mentioned in 16 01 11	
16 01 19	plastic	
16 01 20	glass	
16 03	off-specification batches and unused products	
16 03 04	inorganic wastes other than those mentioned in 16 03 03	
16 03 06	organic wastes other than those mentioned in 16 03 05	
16 08	spent catalysts	
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)	
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified	
16 11	waste linings and refractories	
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01	
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03	
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05	
17	Construction and demolition wastes (including excavated soil from contaminated sites)	
17 01	concrete, bricks, tiles and ceramics	
17 01 01	concrete	
17 01 02	bricks	
17 01 03	tiles and ceramics	
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	
17 02	wood, glass and plastic	
17 02 01	wood	

	Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)		
Waste code	Description		
17 02 02	glass		
17 02 03	plastic		
17 03	bituminous mixtures, coal tar and tarred products		
17 03 02	bituminous mixtures other than those mentioned in 17 03 01		
17 04	metals (including their alloys)		
17 04 11	cables other than those mentioned in 17 04 10		
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil		
17 05 04	soil and stones other than those mentioned in 17 05 03		
17 05 06	dredging spoil other than those mentioned in 17 05 05		
17 05 08	track ballast other than those mentioned in 17 05 07		
17 06	insulation materials and asbestos-containing construction materials		
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03		
17 09	other construction and demolition wastes		
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03		
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)		
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans		
18 01 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 02	wastes from research, diagnosis, treatment or prevention of disease involving animals		
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection		
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use		
19 01	wastes from incineration or pyrolysis of waste		
19 01 12	bottom ash and slag other than those mentioned in 19 01 11		
19 01 14	fly ash other than those mentioned in 19 01 13		
19 01 16	boiler dust other than those mentioned in 19 01 15		
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17		
19 01 19	sands from fluidised beds		
19 02	wastes from physico/chemical treatments of waste (including dechromatation decyanidation, neutralisation)		
19 02 03	premixed wastes composed only of non-hazardous wastes		
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05		
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09		
19 03	stabilised/solidified wastes		

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste (NEQ and SWA)		
Waste code Description		
19 03 05	stabilised wastes other than those mentioned in 19 03 04	
19 03 07	solidified wastes other than those mentioned in 19 03 06	
19 04	vitrified waste and wastes from vitrification	
19 04 01	vitrified waste	
19 05	wastes from aerobic treatment of solid wastes	
19 05 01	non-composted fraction of municipal and similar wastes	
19 05 02	non-composted fraction of animal and vegetable waste	
19 05 03	off-specification compost	
19 06	wastes from anaerobic treatment of waste	
19 06 04	digestate from anaerobic treatment of municipal waste	
19 06 06	digestate from anaerobic treatment of animal and vegetable waste	
19 08	wastes from waste water treatment plants not otherwise specified	
19 08 01	screenings	
19 08 02	waste from desanding	
19 08 05	sludges from treatment of urban waste water	
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats	
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11	
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13	
19 09	wastes from the preparation of water intended for human consumption or water for industrial use	
19 09 01	solid waste from primary filtration and screenings	
19 09 02	sludges from water clarification	
19 09 03	sludges from decarbonation	
19 09 04	spent activated carbon	
19 09 05	saturated or spent ion exchange resins	
19 09 06	solutions and sludges from regeneration of ion exchangers	
19 10	wastes from shredding of metal-containing wastes	
19 10 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	
19 11	wastes from oil regeneration	
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05	
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19 12 04	plastic and rubber	
19 12 07	wood other than that mentioned in 19 12 06	
19 12 08	textiles	
19 12 09	minerals (for example sand, stones)	

Waste code	Description	
19 12 10	combustible waste (refuse derived fuel)	
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	
20 01	separately collected fractions (except 15 01)	
20 01 08	biodegradable kitchen and canteen waste	
20 01 10	clothes	
20 01 11	textiles	
20 01 25	edible oil and fat	
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27	
20 01 30	detergents other than those mentioned in 20 01 29	
20 01 38	wood other than that mentioned in 20 01 37	
20 01 39	plastics	
20 01 41	wastes from chimney sweeping	
20 01 99 ^[1]	Other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection	
20 02	garden and park wastes (including cemetery waste)	
20 02 02	soil and stones	
20 02 03	other non-biodegradable wastes	
20 03	other municipal wastes	
20 03 01	mixed municipal waste	
20 03 02	waste from markets	
20 03 03	street-cleaning residues	
20 03 04	septic tank sludge	
20 03 06	waste from sewage cleaning	
20 03 07	bulky waste	
Note 1 – NEQ pe Note 2 – SWA pe	•	

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell (NEQ)	
EWC code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 05*	other tailings containing dangerous substances
01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals

EWC code Description		
01 04	wastes from physical and chemical processing of non-metalliferous minerals	
01 04 07*	wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals	
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES	
04 02	wastes from the textile industry	
04 02 19*	sludges from on-site effluent treatment containing dangerous substances	
06	WASTES FROM INORGANIC CHEMICAL PROCESSES	
06 03	wastes from the MFSU of salts and metallic oxides	
06 03 11*	solid salts containing cyanides	
06 03 13*	solid salts containing heavy metals	
06 03 15*	metallic oxides containing heavy metals	
06 04	metal-containing wastes other than those mentioned in 06 03	
06 04 03*	wastes containing arsenic	
06 04 04*	wastes containing mercury	
06 04 05*	wastes containing other heavy metals	
06 05	sludges from on-site effluent treatment	
06 05 02*	sludges from on-site effluent treatment containing dangerous substances	
06 07	wastes from the MFSU of halogens and halogen chemical processes	
06 07 01*	wastes containing asbestos from electrolysis	
06 13	wastes from inorganic chemical processes not otherwise specified	
06 13 04*	wastes from asbestos processing	
06 13	wastes from inorganic chemical processes not otherwise specified	
06 13 02*	spent activated carbon (except 06 07 02)	
06 13 04*	wastes from asbestos processing	
07	WASTES FROM ORGANIC CHEMICAL PROCESSES	
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals	
07 01 10*	other filter cakes and spent absorbents	
07 01 11*	sludges from on-site effluent treatment containing dangerous substances	
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres	
07 02 10*	other filter cakes and spent absorbents	
07 02 11*	sludges from on-site effluent treatment containing dangerous substances	
07 02 14*	wastes from additives containing dangerous substances	
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)	
07 03 10*	other filter cakes and spent absorbents	
07 03 11*	sludges from on-site effluent treatment containing dangerous substances	
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides	

EWC code Description		
07 04 10*	other filter cakes and spent absorbents	
07 04 11*	sludges from on-site effluent treatment containing dangerous substances	
07 04 13*	solid wastes containing dangerous substances	
07 05	wastes from the MFSU of pharmaceuticals	
07 05 10*	other filter cakes and spent absorbents	
07 05 11*	sludges from on-site effluent treatment containing dangerous substances	
07 05 13*	solid wastes containing dangerous substances	
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified	
07 07 10*	other filter cakes and spent absorbents	
07 07 11*	sludges from on-site effluent treatment containing dangerous substances	
10	WASTES FROM THERMAL PROCESSES	
10 01	wastes from power stations and other combustion plants (except 19)	
10 01 04*	oil fly ash and boiler dust	
10 01 13*	fly ash from emulsified hydrocarbons used as fuel	
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing dangerous substances	
10 01 16*	fly ash from co-incineration containing dangerous substances	
10 01 18*	wastes from gas cleaning containing dangerous substances	
10 01 20*	sludges from on-site effluent treatment containing dangerous substances	
10 01 22*	aqueous sludges from boiler cleansing containing dangerous substances	
10 02	wastes from the iron and steel industry	
10 02 07*	solid wastes from gas treatment containing dangerous substances	
10 02 13*	sludges and filter cakes from gas treatment containing dangerous substances	
10 03	wastes from aluminium thermal metallurgy	
10 03 19*	flue-gas dust containing dangerous substances	
10 03 23*	solid wastes from gas treatment containing dangerous substances	
10 03 25*	sludges and filter cakes from gas treatment containing dangerous substances	
10 04	wastes from lead thermal metallurgy	
10 04 04*	flue-gas dust	
10 04 06*	solid wastes from gas treatment	
10 04 07*	sludges and filter cakes from gas treatment	
10 05	wastes from zinc thermal metallurgy	
10 05 03*	flue-gas dust	
10 05 05*	solid waste from gas treatment	
10 05 06*	sludges and filter cakes from gas treatment	
10 06	wastes from copper thermal metallurgy	
10 06 03*	flue-gas dust	

EWC code	Description	
10 06 06*	solid wastes from gas treatment	
10 06 07*	sludges and filter cakes from gas treatment	
10 08	wastes from other non-ferrous thermal metallurgy	
10 08 15*	flue-gas dust containing dangerous substances	
10 08 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances	
10 09	wastes from casting of ferrous pieces	
10 09 05*	casting cores and moulds which have not undergone pouring containing dangerous substances	
10 09 07*	casting cores and moulds which have undergone pouring containing dangerous substances	
10 09 09*	flue-gas dust containing dangerous substances	
10 09 11*	other particulates containing dangerous substances	
10 09 13*	waste binders containing dangerous substances	
10 10	wastes from casting of non-ferrous pieces	
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances	
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances	
10 10 09*	flue-gas dust containing dangerous substances	
10 10 11*	other particulates containing dangerous substances	
10 10 13*	waste binders containing dangerous substances	
10 11	wastes from manufacture of glass and glass products	
10 11 09*	waste preparation mixture before thermal processing, containing dangerous substances	
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)	
10 11 13*	glass-polishing and -grinding sludge containing dangerous substances	
10 11 15*	solid wastes from flue-gas treatment containing dangerous substances	
10 11 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances	
10 11 19*	solid wastes from on-site effluent treatment containing dangerous substances	
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products	
10 12 09*	solid wastes from gas treatment containing dangerous substances	
10 12 11*	wastes from glazing containing heavy metals	
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them	
10 13 09*	wastes from asbestos-cement manufacture containing asbestos	
10 13 12*	solid wastes from gas treatment containing dangerous substances	
10 14	waste from crematoria	

EWC code	Description	
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY	
11 01	wastes from chemical surface treatment and coa materials (for example galvanic processes, zinc processes, etching, phosphatising, alkaline degr	coating processes, pickling
11 01 16*	saturated or spent ion exchange resins	
11 02	wastes from non-ferrous hydrometallurgical proc	esses
11 02 02*	sludges from zinc hydrometallurgy (including jar	osite, goethite)
11 02 07*	other wastes containing dangerous substances	
11 05	wastes from hot galvanising processes	
11 05 03*	solid wastes from gas treatment	
11 05 04*	spent flux	
12	WASTES FROM SHAPING AND PHYSICAL AN TREATMENT OF METALS AND PLASTICS	ID MECHANICAL SURFACE
12 01	wastes from shaping and physical and mechanic and plastics	cal surface treatment of metals
12 01 16*	waste blasting material containing dangerous su	bstances
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	
15 01	packaging (including separately collected municipal packaging waste)	
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	Dangerous component to be asbestos only. Excludes sludges and biodegradable substances.
16	WASTES NOT OTHERWISE SPECIFIED IN TH	IE LIST
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)	
16 01 11*	brake pads containing asbestos	Excludes sludges and biodegradable substances.
16 02	wastes from electrical and electronic equipment	
16 02 09*	transformers and capacitors containing PCBs	
16 02 12*	discarded equipment containing free asbestos	Excludes sludges and biodegradable substances.
16 03	off-specification batches and unused products	
16 03 03*	inorganic wastes containing dangerous substances	
16 04	waste explosives	
16 04 01*	waste ammunition	
16 04 03*	other waste explosives	

EWC code	Description		
16 08	spent catalysts		
16 08 02*	spent catalysts containing dangerous transition metals ¹ or dangerous transition metal compounds		
16 08 05*	spent catalysts containing phosphoric acid		
16 08 07*	spent catalysts contaminated with dangerous su	ubstances	
16 11	waste linings and refractories		
16 11 01*	carbon-based linings and refractories from meta dangerous substances	allurgical processes containing	
16 11 03*	other linings and refractories from metallurgical substances	processes containing dangerous	
16 11 05*	linings and refractories from non-metallurgical processes containing dangerous substances		
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)		
17 01	concrete, bricks, tiles and ceramics		
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances		
17 02	wood, glass and plastic		
17 02 04*	glass, plastic and wood containing or contamina	ated with dangerous substances	
17 04	metals (including their alloys)	metals (including their alloys)	
17 04 09*	metal waste contaminated with dangerous substances		
17 04 10*	cables containing oil, coal tar and other dangerous substances		
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil		
17 05 03*	soil and stones containing dangerous substances		
17 05 05*	dredging spoil containing dangerous substances		
17 05 07*	track ballast containing dangerous substances		
17 06	insulation materials and asbestos-containing construction materials		
17 06 01*	insulation materials containing asbestos	Excludes biodegradable substances	
17 06 03*	other insulation materials consisting of or contain	ning dangerous substances	
17 06 05*	construction materials containing asbestos ²	Excludes biodegradable substances.	

¹ For the purpose of this entry, transition metals are: scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum. These metals or their compounds are dangerous if they are classified as dangerous substances. The classification of dangerous substances shall determine which among those transition metals and which transition metal compounds are hazardous. ² As far as the landfilling of waste is concerned, Member States may decide to postpone the entry into force of this entry until the establishment of appropriate measures for the treatment and disposal of waste from construction material containing asbestos. These measures are to be established according to the procedure referred to in Article 17 of Council Directive 1999/31/EC on the landfill of waste (OJ L 182,16.7.1999,p.1) and shall be adopted by 16 July 2002 at the latest.'

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell (NEQ)		
EWC code Description		
17 09	other construction and demolition wastes	
17 09 01*	construction and demolition wastes containing mercury	
17 09 02*	construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)	
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances	
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	
19 01	wastes from incineration or pyrolysis of waste	
19 01 05*	filter cake from gas treatment	
19 01 07*	solid wastes from gas treatment	
19 01 10*	spent activated carbon from flue-gas treatment	
19 01 11*	Bottom ash and slag containing hazardous substances	
19 01 13*	fly ash containing dangerous substances	
19 01 15*	boiler dust containing dangerous substances	
19 01 17*	pyrolysis wastes containing dangerous substances	
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)	
19 02 04*	premixed wastes composed of at least one hazardous waste	
19 02 05*	sludges from physico/chemical treatment containing dangerous substances	
19 02 11*	other wastes containing dangerous substances	
19 03	stabilised/solidified wastes ³	
19 03 04*	wastes marked as hazardous, partly ⁴ stabilised	
19 03 06*	wastes marked as hazardous, solidified	
19 04	vitrified waste and wastes from vitrification	
19 04 02*	fly ash and other flue-gas treatment wastes	
19 08	wastes from waste water treatment plants not otherwise specified	
19 08 06*	saturated or spent ion exchange resins	
19 08 07*	sludges from regeneration of ion exchangers	
19 08 08*	membrane system waste containing heavy metals	
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water	

³ Stabilisation processes change the dangerousness of the constituents in the waste and thus transform hazardous waste into non-hazardous waste. Solidification processes only change the physical state of the waste (e.g. liquid into solid) by using additives without changing the chemical properties of the waste.

⁴ A waste is considered as partly stabilised if, after the stabilisation process, dangerous constituents which have not been changed completely into non-dangerous constituents could be released into the environment in the short, middle or long term.

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell (NEQ)		
EWC code	Description	
19 10	wastes from shredding of metal-containing wastes	
19 10 03*	fluff-light fraction and dust containing dangerous substances	
19 10 05*	other fractions containing dangerous substances	
19 11	wastes from oil regeneration	
19 11 07*	wastes from flue-gas cleaning	
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	
20 01	separately collected fractions (except 15 01)	
20 01 21*	fluorescent tubes and other mercury-containing waste	

Table S2.3 Perr	nitted waste types for restoration (NEQ and SWA)
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 05	de-inking sludges from paper recycling
03 03 09	lime mud waste
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete and bricks
17 05	soil (excluding excavated soil from contaminated sites), stones and dredging spoil

Table S2.3 Per	mitted waste types for restoration (NEQ and SWA)
Waste code	Description
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
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 02	sludges from water clarification
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

 Table S2.4 Permitted waste types accepted for treatment excluding liquid waste (Soil Treatment

 Facility Activity A3) (NEQ)

Waste code	Waste code						
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS						
01 04	wastes from physical and chemical processing of non m	etalliferous minerals					
01 04 07*	wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals	Excludes waste with free flowing liquids					
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07	Excludes waste with free flowing liquids					
01 04 09	waste sand and clays						
01 05	drilling muds and other drilling wastes						
01 05 04	freshwater drilling muds and wastes						
01 05 05 *	oil-containing drilling muds and wastes						
01 05 06 *	drilling muds and other drilling wastes containing dangerous substances						
05	WASTES FROM PETROLEUM REFINIGN, NATURAL O AND PYROLYTIC TREATMENT OF COAL	GAS PURIFICATION					
05 01	wastes from petroleum refining						

Waste code	Waste code						
05 01 02*	desalter sludges						
05 01 03*	tank bottom sludges						
05 01 04*	acid alkyl sludges						
05 01 05*	oil spills						
05 01 06*	oily sludges from maintenance operations of the plant or equipment						
05 01 09*	sludges from on-site effluent treatment containing dangerous substances						
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 15*	spent filter clays						
13	OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19)						
13 05	oil/water separator contents						
13 05 01*	solids from grit chambers and oil/water separators						
13 05 02*	sludges from oil/water separators						
13 05 03*	interceptor sludges						
13 05 08*	mixtures of wastes from grit chambers and oil/water separators						
16	WASTE NOT OTHERWISE SPECIFIED IN THE LIST						
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13						
16 07 08*	waste containing oil						
16 07 09*	waste containing other dangerous substances						
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)						
17 02	wood, glass and plastic						
17 02 01	wood						
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil						
17 05 03 *	soil and stones containing dangerous substances						
17 05 04	soil and stones other than those mentioned in 17 05 03						
17 05 05 *	dredging spoil containing dangerous substances						
17 05 06	dredging spoil other than those mentioned in 17 05 05						
17 05 07 *	track ballast containing dangerous substances						
17 05 08	track ballast other than those mentioned in 17 05 07						
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE						
19 02	waste from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)						
19 02 03	premixed waste composed only of non hazardous wastes						

Vaste code	Waste code						
19 02 04*	premixed wastes composed of at least one hazardous waste						
19 02 05*	sludges from physico/chemical treatment containing dangerous substances						
19 02 06	sludges from physico/chemical treatment other than mentioned in 19 02 05						
19 02 07*	oil and concentrates from separation						
19 03	stabilised/solidified wastes 1						
19 03 04*	wastes marked as hazardous, partly1 stabilised						
19 03 05	stabilised wastes other than those mentioned in 19 03 04						
19 03 06*	wastes marked as hazardous, solidified						
19 03 07	solidified wastes other than those mentioned in 19 03 06						
19 05	wastes from aerobic treatment of solid wastes						
19 05 03	off-specification compost						
19 08	wastes from waste water treatment plants not otherwise specified						
19 08 01	screenings						
19 08 02	waste from desanding						
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing compacting, pelletising) not otherwise specified						
19 12 07	wood other than that mentioned in 19 12 06						
19 13	wastes from soil and groundwater remediation						
19 13 01 *	solid waste from soil remediation containing dangerous substances						
19 13 02	solid waste from soil remediation other than those mentioned in 19 13 01						
19 13 03 *	sludges from soil remediation containing dangerous substances						
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03						
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS						
20 01	separately collected fractions (except 15 01)						
20 01 38	wood other than that mentioned in 20 01 37						
20 02	garden and park wastes (including cemetery waste)						
20 02 01	biodegradable waste (woody waste only)						
20 03	other municipal wastes						
20 03 03	street-cleaning residues						

Table S2.5 Per Facility A4) (N	mitted waste types and quantities for handpicking of asbestos waste (Soil Treatment EQ)
Exclusions	Wastes having any of the following characteristics shall not be accepted:
	Asbestos in unbound fibrous form (FREE CHRYSOTILE FIBROUS ASBESTOS IN THE SOIL MUST BE < 0.1% w/w. OTHER FORMS OR MIXED FORMS OF FIBROUS ASBESTOS IN THE SOIL MUST BE <0.01% w/w)
	Wastes with hazard codes HP1, HP2, HP3, HP9, HP12, HP15
Waste code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances (CONTAINS IDENTIFIABLE PIECES OF BONDED ASBESTOS (any particle of a size that can be identified as potentially being asbestos by a competent person if examined by the naked eye))
17 05 04	soil and stones other than those mentioned in 17 05 03 (CONTAINS IDENTIFIABLE PIECES OF BONDED ASBESTOS (any particle of a size that can be identified as potentially being asbestos by a competent person if examined by the naked eye))
17 06	insulation materials and asbestos-containing construction materials
17 06 05*	construction materials containing asbestos (DISCRETE PIECES OF BONDED ASBESTOS WITHIN THE SOIL MATRIX ONLY)

Schedule 3 – Emissions and monitoring

Monitoring point reference/Description	Limit	Monitoring frequency	Monitoring standard and method
Operational Cells or Phases (NEQ) (Any c condition, 2.5)	ells or phases that do not have	e a final engineere	d cap agreed in accordance with the landfill engineering
Cell 1(1C), Cell 2 (2D), Cell 3 (3D) and Cell 4 (4D) as shown on drawing 'Site Monitoring Plan', reference R1180305, revision 5, dated 10/03/16	1 m above cell base [1]	Monthly	In accordance with Environment Agency document LFTGN02 (February 2003) 'Guidance on Monitoring of Landfill Leachate Groundwater and Surface Water' or such other subsequent guidance as may be agreed in writing with the Environment
Cell 5 (5A, 5B, 5C), Cell 6 (6A, 6B, 6C) and Cell 7 (7B, 7C, 7D) as shown on drawing 'Site Monitoring Plan', reference R1180305, revision 5, dated 10/03/16	3 m above cell base		Agency.
Non Operational Cells or Phases (SWA) (2.5)	Any cells or phases that have	a final engineered	cap agreed in accordance with the landfill engineering condition,
Leachate compliance points: LW17 (83303117), LW18 (83303118), LW19 (83303119), LW20 (83303120), LW21 (8330321), LW22 (83303122), LW23 (83303123) and LW24 (83303124)	2 m above cell base	Quarterly	In accordance with Environment Agency document LFTGN02 (February 2003) 'Guidance on Monitoring of Landfill Leachate Groundwater and Surface Water' or such other subsequent guidance as may be agreed in writing with the Environment Agency.
as shown on drawing 'Site Monitoring Plan' ref R1180900 Rev 4 dated			

Emission point Ref. & Location	Paramet er	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method	
	Oxides of Nitrogen	Gas utilisation	500 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment	
	СО	plant	1400 mg/m ³) mg/m ³ Agency		Agency	
			1000 mg/m ³				
LFGE 2 on Plan SWA/03	Oxides of Nitrogen	Gas utilisation	650 mg/m³	may be agreed in writing v	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment		
	СО	plant	1500 mg/m ³			Agency	
	Total VOCs		1750 mg/m ³				
Flare A2 on Plan 2/SWA/03;	Oxides of Nitrogen	Landfill gas flares	150 mg/m ³	Hourly mean	Annually		

Emission point Ref. & Location	Paramet er	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Flare A4 and A5	СО		50 mg/m ³			As per M2 or such other subsequent guidance as
on Plan 2/NEQ/03	Total VOCs	-	10 mg/m ³	-		may be agreed in writing with the Environment Agency
						Monitoring is unnecessary where the flare is active for <10% of the year
Biofilter (NEQ)	Total VOCs		75 mg/m ³	Hourly mean	Monthly	To be agreed in writing with the Environment Agency
	Benzene		5 mg/m³			
	Total Petroleu m Hydrocar bons (TPH)		-			
	Toluene		-			
	Ethly Benzene		-			
	Xylene]	-			
	Polycyclic Aromatic Hydrocar bons (PAH)		-			

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method	
WR3016	Volume	Discharg	9,800 m3	Daily	Continuous	As specified in Environment Agency Guidance	
(Quarry Discharge) as shown	Suspended Solids	e from the Dewateri	25 mg/l	Spot Sample	Monthly	 TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), o such other subsequent guidance as may be agreed 	
on drawing no. R1180302 dated	Oil and Grease	ng Outlet	No visible trace at Nutfield Marsh			in writing with the Environment Agency. Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec 2011 or such other subsequent guidance as may be	
27.03.2012t o the	рН		>6 <9		ag	agreed in writing with the Environment Agency	
Redhill Brook	Chloride		250 mg/l				
(NEQ)	Ammoniacal Nitrogen		3 mg/l				
	Arsenic		0.01 mg/l				
	Cadmium		0.4 µg/l	-			
	Nickel		0.02 mg/l				
	Potassium		7 mg/l				
Sulphate (SO ₄)			250 mg/l				
	Tributyltin Mecoprop	Tributyltin 0.00002 mg/l					
			0.002 mg/				
Benzene	Benzene		0.001 mg/l				
WR3017 (Lagoon	Volume of wheel - wash effluent	Discharge from the	25 m ³ / day	Daily	Continuous		
Discharge) as shown	Suspended Solids	Settlement Lagoon	30 mg/l	Spot sample	Monthly		
on drawing no.	Oil and Grease	-	None visible at Redhill Brook				

Table S3.3 P	Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements (NEQ and SWA)								
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method			
R1180302 dated	рН		>6 and <9						
27.03.2012 To the Redhill Brook (SWA)	Chloride		150 mg/l						

Monitoring point reference	Parameter [1]	Limit (including unit) [1]	Reference Period	Monitoring frequency	Monitoring standard or method
H90/4, H98/GWB/20, H98/GWB/23.0,	рН	None set	Spot	Monthly	As specified in Environment Agency
H98/GWC/30, H98/GWC/85, H0501A, H0501B, H0502A, H0502B, H0503A,	Chloride		Sample	Monthly	Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface
H0503B, H0504A, H0504B, H0505A, H0505B, H0506A, H0506B, H0507A,	Ammoniacal nitrogen	-		Monthly	Water' (February 2003), or such other subsequent guidance as may be agreed
H0507B, H0508A, H0508B, H0509A, H0509B, H1010A, H1010B, H1011A,	Nickel			Monthly	 in writing with the Environment Agency Horizontal Guidance Note H1 –
H1011B as shown on drawing no. R1180302 dated 27.03.2012 (NEQ);	Potassium			Monthly	Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec
H90/1, H90/2 and H90/3 as shown on	Cadmium			Quarterly	2011) or such other subsequent guidance as may be agreed in writing with the
drawing no. R1180302 dated 27.03.2012 (SWA)	Mecoprop			Quarterly	Environment Agency
	Tributyltin oxide			Annually	
Note 1 : Or otherwise agreed in accordance with					

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
North East Quadrant (NEQ)	·	·	·	
East side:	Methane	no limit	Monthly	As per LFTGN03 (September 2004) or such other
Chilmead Farm, G90 - G90/51, G90/55, G90/58 and	Carbon Dioxide	no limit	(operating phase)	subsequent guidance as may be agreed in writing with the Environment Agency.
G90/62	Oxygen	no limit	Every six	Record whether the ground is: • waterlogged • frozen
	Atmospheric pressure	no limit	months (aftercare phase)	
	Differential Pressure	no limit		snow covered
West side:	Methane	1 %v/v	Monthly	As per LFTGN03 (September 2004) or such other
G90 - G91/69 North west:	Carbon Dioxide	5 %v/v	(operating phase)	subsequent guidance as may be agreed in writing with the Environment Agency.
G050 – 83301011 (G0501A), 83301012	Oxygen	no limit	Every six	Record whether the ground is:
(G0501B), 83301013 (G0501C), 83301021 (G0502A), 83301022 (G0502B), 83301023 (G0502C), 83301031 (G0503A), 83301032 (G0503B), 83301033 (G0503C),	Atmospheric pressure	no limit	months (aftercare	 waterlogged frozen
	Differential Pressure	no limit	– phase)	snow covered

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
83301041 (G0504A), 83301042 (G0504B), 83301043 (G0504C), 83301051 (G0505A), 83301052 (G0505B), 83301053 (G0505C), 83301061 (G0506A), 83301062 (G0506B), 83301063 (G0506C), 83301071 (G0507A), 83301072 (G0507B), 83301073 (G0507C), 83301081 (G0508A), 83301082 (G0508B), 83301083 (G0508C), 83301091 (G0509A), 83301092 (G0509B), 83301093 (G0509C), 83301101 (G0510A), 83301102 (G0510B), 83301103 (G0510C), 83301111 (G0511A), 83301112 (G0511B), 83301113 (G0511C), 83301121 (G0512A), 83301122, (G0512B) and 83301123 (G0512C)				
South West Area (SWA)				
East Side: G02 - G02/46.	Methane	no limit	Monthly (operating	As per LFTGN03 (enter version number and issue date) or such other subsequent guidance as may be agreed in
G90 - G90/39 and G90/42. G95 - G95/34.	Carbon Dioxide	no limit	phase)	writing with the Environment Agency. Record whether the ground is:
G97 - G97/40, G97/41, G97/44 and	Oxygen	no limit	Every six months	
G97/47.	Atmospheric pressure	no limit	(aftercare phase)	 waterlogged frozen snow covered
	Differential Pressure	no limit		
West Side:	Methane	1 %v/v		As per LFTGN03 (September 2004) or such other
G90 - G90/63, G90/64, G90/65, G90/66, G90/67, and G90/68.	Carbon Dioxide	5 %v/v		subsequent guidance as may be agreed in writing with the Environment Agency.

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
	Oxygen	no limit	Monthly	
	Atmospheric pressure	no limit	(operating phase)	Record whether the ground is: • waterlogged
	Differential Pressure	no limit	Every six months (aftercare phase)	frozensnow covered
South West Corner:		Monthly	As per LFTGN03 (September 2004) or such other	
G90 - G90/5, G90/6, G90/7, G90/8, G90/9, G90/10, G90/13, G90/14, G90/15, G90/16, G90/17 and G90/18.	Carbon Dioxide	1.5 %v/v	(operating phase)	subsequent guidance as may be agreed in writing with the Environment Agency. Record whether the ground is:
G90/16, G90/17 and G90/16.	Oxygen	no limit	Every six	
South East Corner: G01 - G01/35 and G01/36.	Atmospheric pressure	no limit	months (aftercare	 waterlogged frozen
G90 - G90/21 and G90/29. G91 - G91/19, G91/20 and G91/22 G95 - G95/23, G95/24. G95/25, G95/26, G95/27, G95/28, G95/30, G95/31, G95/32 and G95/33.	Differential Pressure	no limit	(aftercare - phase)	snow covered

Table S3.6 Point source requirements (NEQ)	e emissions to se	ewer, effluent treatment plant	t or by tankering	or other transf	er off-site – em	ission limits and monitoring
Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method

Outlet to effluent	-	Effluent treatment plant	-	-	-	-
treatment plant		identified on Plan ref:				
identified on Plan ref: 2/NEQ/03		2/NEQ/03				
2/NEQ/03						

Monitoring Point Ref. /Description	Parameter	Limit	Reference Period	Monitoring Frequency	Monitoring Standard or Method
20m downwind of asbestos disposal cell (NEQ)	Asbestos Fibres	Where total fibre concentration exceeds 0.01 fibres/ ml in any sample, that sample must be submitted for electron microscopy to confirm the concentration of asbestos fibres present	2 hours	Twice per year or every 5000 tonnes asbestos deposited, whichever is greater	While asbestos is being deposited Pumped sampling 1m above ground level Flow rate = 4 litres/ minute Minimum sample volume = 480 litres Filter pore size = 1.2µm Asbestos fibre limit of detection = 0.001 fibres/ ml
50m upwind of asbestos disposal cell (NEQ)	Asbestos Fibres		2 hours	During all downwind monitoring	
Site boundary downwind of asbestos disposal cell (NEQ)	Asbestos Fibres		2 hours	Minimum twice per year	

		n ambient air - monitoring r	-		
Monitoring point(s)	Particulate matter		In accordance with Agency Guidance 'M17 – Monitoring of Particulate Matter in ambient air around waste facilities), or any		
determined in accordance with the improvement programme in The Particulate Monitoring and Action Plan, drawing 2/NEQ/03 and 2/SWA/03	Suspended particulates PM ₁₀	Not to exceed 50 µg/m ³ more than 35 times per year	24 hour average		subsequent guidance
Monitoring point(s) determined in accordance with the improvement programme in The Particulate Monitoring and Action Plan, drawing 2/SWA/03	Suspended particulates PM ₁₀	Not to exceed 40 µg/m ³	Annual Average	Quarterly	In accordance with Agency Guidance 'M17 – Monitoring of Particulate Matter in ambient air around waste facilities), or any subsequent guidance

Monitoring point Ref. /description	Parameter	Monitoring frequency	Monitoring Standard or method
Permanently capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency
Temporarily capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency
Whole site	Total methane emission	As agreed with the Environment Agency	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency
Uncapped areas	Methane concentration	Every 12 months	As agreed with the Environment Agency based on the wording of revised LFTGN 07 or landfill sector guidance or such other subsequent guidance as may be agreed in writing with the Environment Agency

Table S3.9 Groundw	ater – other monitoring requireme	ents (NEQ and SV	VA)
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
Up gradient MEPP	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3,
	total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	version 2.1, Dec 2011, or such other subsequent guidance as may be agreed in writing with the Environment Agency
	Hazardous substances	Annually for first six years of operation	

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

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In waste gas monitoring boreholes or sealed leachate wells or sacrificial gas extraction system in cells for non- hazardous waste (NEQ)	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly until gas extraction commences	Calibrated handheld monitoring instrument	For cells or phases which have no active gas extraction Gas extraction system shall be installed and extraction commenced once monitoring shows onset of methane production in waste at a rate that can be sustainably extracted Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
	Hydrogen sulphide	Quarterly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (v3 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency	For cells or phases which have no active gas extraction Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans
One in waste borehole per cell and / or leachate wells for separate cells for stable non reactive hazardous waste and asbestos on landfills for non-hazardous waste (NEQ)	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly		
	Hydrogen sulphide Hydrogen	Quarterly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (v3 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency	Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
One in waste borehole or one leachate well per cell for separate cells for stable non reactive hazardous waste and asbestos for non-hazardous waste (NEQ)	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 (v3 2010) or a trace gas characterisation method agreed with the Environment Agency or such other subsequent guidance as may be agreed in writing with the Environment Agency	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling
Gas collection system at well control valve, manifolds and strategic points on gas system (NEQ and SWA)	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Gas flow rate or suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Monthly or at such other frequency as may be agreed in writing with the Environment Agency	Calibrated handheld monitoring instrument	 Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertaken Record the ambient air temperature and whether the ground is: waterlogged frozen snow covered

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Gas collection system at well control valve (NEQ and SWA)	Hydrogen sulphide	Six monthly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (v3 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans
Output to flare or LFG Utilisation Compound (NEQ and SWA)	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 (v3 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency [or a trace gas characterisation method agreed with the Environment Agency]	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling
Output to flare or LFG Utilisation Compound (NEQ and SWA)	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly		Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken

Table S3.10 Landfill g	as – other monitori	ng requirements (N	EQ and SWA)	
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Flare A2 on Plan 2/SWA/03	Temperature	As per LFTGN05 (V2	As per M2 or such other subsequent guidance as may	
Flare A4 and A5 on Plan 2/NEQ/03		March 2011) or such other subsequent guidance as may be agreed in writing with the Environment Agency	be agreed in writing with the Environment Agency	
LFGE 1, 2 and 3 on Plan 2/SWA/03 LFGE 4, 5 and 6 on Plan 2/NEQ/03	NO _x and CO	Quarterly	In accordance with Appendix C of LFTGN08, version 2: 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency	Where monitoring using hand-held, electrochemical equipment indicates an exceedance of the emissions standards specified in Table S3.2, these shall be used as action levels and the operator shall investigate the cause and take appropriate measures to reduce emissions
Inlet and outlet of Carbon Tower (NEQ)	Hydrogen Sulphide	Weekly	-	-

Table S3.11 Leachate – other mor	nitoring requirements (NEQ and SW)	A)		
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Operational Cells or Phases		At leachate compliance point as listed in		
(Any cell or phases that do not have condition 2.6)	e a final engineered cap agreed in acco	table S3.1 As specified in Environment Agency		
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, Chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Quarterly	Guidance TGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec 2011) with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing with the Environment Agency	None
MEPP	Hazardous substances	Annually		None
MEPP	Depth to base (mAOD)	Annually		None
Non Operational Cells or Phases	(MAOD)			
-	engineered cap agreed in accordance	with condition		
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, Chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Annually		
MEPP	Hazardous substances	Once every four years		None
MEPP	Depth to base (mAOD)	Annually		

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

Monitoring Point Ref. /Description	Parameter	Monitoring frequency [1]	Monitoring standard or method	Other specifications
MEPP	Methane in ambient air	Monthly	Spot sample	no limit

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Soil biopiles (ref. Variation Drawing A4 dated 27.03.07)	Total Petroleum Hydrocarbons (TPH) Polycyclic Aromatic Hydrocarbons (PAHs) Pentachlorophenol (PCP) Note 1 Total Volatile Organic Compounds (VOCs) Phenols pH	Each completed batch of treated soil shall be sampled	To be agreed with the Environment Agency	Laboratory must be accredited to EN ISO/IEC ISO17025:2000 for the analysis specified Samples to be obtained using standard sampling procedures as pe BS 812

Table S3.15 Process monitoring requirements						
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method	Other specifications	
Monitoring location labelled M as shown on Figure 6 – Diagram of air monitoring locations within the Asbestos Management Plan document	Asbestos Fibres	0.01 fibres/ml. Where total fibre concentration exceeds 0.01 fibres/ml in any sample, that sample must be submitted for electron microscopy to confirm the concentration of asbestos fibres present	Twice weekly on 2 separate days and continuous sampling over a 4 hour period	In line with M17 Guidance. Whilst soils are being unloaded and constructed into stockpiles, processed through the picking station, constructed into stockpiles • Pumped sampling • 1m above ground level • Flow rate = 4 litres/ minute • Minimum sample volume = 480 litres • Filter pore size = 0.8- 1.2µm	-	

Table S3.15 Process monitoring requirements					
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method	Other specifications
				Asbestos fibre limit of detection = 0.001 fibres/m	

Schedule 4 – Reporting

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

Parameter	Reporting period	Period ends
_eachate As specified by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December
Point source emission to air As specified by schedule 3, table S3.2	Every 12 months	31 December
Point source emission to water (other than sewer) As specified by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December
Emission to groundwater As specified by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December
Landfill gas in external monitoring boreholes As specified by schedule 3, table S3.5	Every 3 months	31 March, 30 June, 30 September, 31 December
Point source emission to sewer, effluent treatment plant, tankering or other off site transfer As specified by schedule 3, table S3.6	Every 3 months	31 March, 30 June, 30 September, 31 December
Particulate matter in ambient air. As required by schedule 3, table S3.7	Every 6 months	30 June, 31 December
Emission of landfill gas from capped surfaces As specified by schedule 3, table S3.8	Every 12 months	31 December
Other groundwater monitoring As specified by schedule 3, table S3.9	Every 3 months	31 March, 30 June, 30 September, 31 December
Other Landfill gas monitoring As specified by schedule 3, table S3.10	Every 3 months	31 March, 30 June, 30 September, 31 December
Trace gas monitoring	Every 12 months	31 December
Other leachate monitoring As specified by schedule 3, table S3.11	Every 12 months	31 December

Table S4.1 Reporting of monitoring data (NEQ and SWA)		
Parameter	Reporting period	Period ends
Other surface water monitoring As specified by schedule 3, table S3.12	Every 12 months	31 December
Meteorological data Landfill Directive, annex III, section 2	Every 12 months	31 December
Other ambient air monitoring As specified by Schedule 3, table S3.13	Every 3 months	31 March, 30 June, 30 September, 31 December
Other contaminated soil monitoring As specified by Schedule 3, table S3.14	Every 3 months	31 March, 30 June, 30 September, 31 December
Asbestos fibres As specified by Schedule 3, table S3.15	Every 3 months	31 March, 30 June, 30 September, 31 December

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

Table S4.2: Annual production/treatment (NEQ and SWA)	
Leachate:	Cubic metres/year
Disposed of off site;	
Disposed of to any onsite effluent treatment plant;	
Recirculated into the waste mass.	
Accepted from offsite for treatment at any onsite effluent treatment plant.	
Landfill gas:	Normalised cubic metres/year
combustion in flares;	
combustion in gas engines;	
Other methods of gas utilisation.	
Average methane content entering the landfill gas utilisation or treatment compound (based on the annual average of Table S3.10 monitoring)	% methane v/v
Methane generation rate (50%ile from a representative model)	m3 /hr

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

Media/parameter	Reporting Format	Date of Form
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Sewer	Form Sewer 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Particulate matter and asbestos fibres	Form Particulate 1 or other reporting format to be agreed in writing with the Environment Agency	26/04/17
Waste Return	Waste Return Form RATS2E	26/04/17
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	26/04/17

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 incident or accident which significantly affects or may significantly affect the environment		
To be notified within 24 hours of	detection	
Date and Time of the event		
Reference or description of the location of the event		
Description of where any release into the environment took place		
Substances(s) potentially released		
Best estimate of the quantity or rate of release of substances		
Measures taken, or intended to be taken, to stop any emission		
Description of the failure or accident.		

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

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

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

(c) Notification requirements 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		
To be notified within 24 hours of detection		
Description of where the effect on the environment was detected		
Substances(s) detected		
Concentrations of substances detected		
Date of monitoring/sampling		

Part B to be supplied as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

"annually" means once every year.

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

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

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

- · For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.
- (a) "Cell layout drawing" means: A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:
 - (i) the location of the new cell on the site;
 - (ii) the proposed level (Above Ordnance Datum) of the base of the excavation;
 - (iii) the proposed finished levels of all containment and leachate drainage layers;
 - (iv) the positions of leachate management infrastructure; and
 - (v) the positions of landfill gas infrastructure (if appropriate).
- (b) A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:
 - (i) changes to slope length and gradient within the cell;
 - (ii) new leachate or landfill gas infrastructure construction design;
 - (iii) slope stability issues such as new basal excavation level; and/or
 - (iv) depth of waste.

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

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

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

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

"emissions to land" includes emissions to groundwater.

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

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

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

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

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

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

"Landfill Infrastructure" means any specified element of the:

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

within the site.

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

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

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

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

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

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

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

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

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

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

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

for the New Cell.

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

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

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

"Pests" means Birds, Vermin and Insects.

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

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

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

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

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

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

"Waste code" - See 'List of Wastes'.

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

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

Where the following terms appear in the waste code list in Tables S2.1, S2.3 they have the meaning given below:

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

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

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

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

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

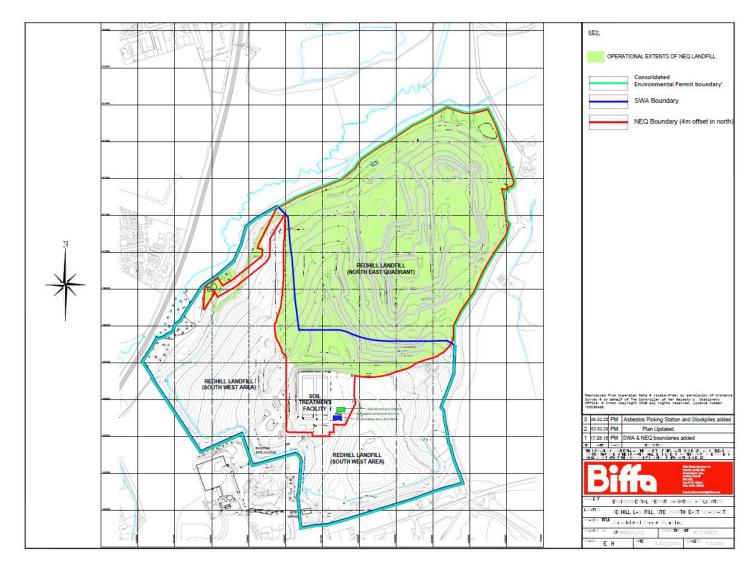
"transition metals" means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified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

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

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

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

Schedule 7 – Site plan



© Crown Copyright. All rights reserved. Environment Agency, 100024198, 2016.

END OF PERMIT

Permit Number: BU8126IY Operator: Biffa Waste Services Limited

Facility:Redhill Landfill SiteForm Number: Air1 / 26/04/2017

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

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

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

Signed

Date.....

Permit Number:BU8126IYOperator:Biffa Waste Services Limited

Facility:

Redhill Landfill Site

Form Number: Water1 / 26/04/2017

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

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

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

Signed

Date.....

Permit Number:BU8126IYOperator:Biffa Waste Services Limited

Facility: Redhill Landfill Site

Form Number: Sewer1 / 26/04/2017

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

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

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.

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

Signed

Date.....

Permit Number:BU8126IYOperator:Biffa Waste Services Limited

Facility: Redhill Landfill Site

Form Number: Leachate 1 / 26/04/2017

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

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

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

Signed Date.....

Date.....

Permit Number:BU8126IYOperator:Biffa Waste Services LimitedFacility:Redhill Landfill SiteForm Number:Groundwater1 / 26/04/2017

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

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

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

Signed

Date.....

Permit Number:AB1234CDOperator:Biffa Waste Services LimitedFacility:Redhill Landfill SiteForm Number:LFG1 / 26/04/2017

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 ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty [4]

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

Signed

Date.....

Permit Number: BU8126IY Operator: Biffa

erator: Biffa Waste Services Limited

Facility: Redhill Landfill Site

Form Number: Particulate1 / 26/04/2017

Reporting of particulates for the period from DD/MM/YYYY to DD/MM/YYYY

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

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

Signed	Date
--------	------

(Authorised