

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biffa Waste Services Limited

Skelton Grange Landfill Site
Biffa Waste Services
Pontefract Lane
Newsam Green
Leeds
LS15 9AD

Variation application number

EPR/BJ9339IF/V014

Permit number

EPR/BJ9339IF

Skelton Grange Landfill Site

Permit number EPR/BJ9339IF

Introductory note

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

The following gives notice of the variation and consolidation of your environmental permit. We have issued this variation to consolidate the original permit and subsequent variations and to update some of the conditions following a statutory review of permits in the landfill sector. We have also converted the permit into the current EPR permit format using modern conditions.

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2010, regulation 34(1), to periodically review permits. As a result of that review we have identified a number of necessary changes we must make to your permit to reflect current legislation and best practice. These changes principally relate to:

- The addition of a standard condition for landfill gas management at landfills that accept biodegradable waste;
- A change to the hydrogeological risk assessment condition so that reviews are undertaken every 6 years rather than every 4 years;
- Standard leachate and groundwater quality monitoring tables (schedule 3); and
- A standard reporting table (schedule 4).

As a result of the application made by the operator this variation also adds Soil Treatment Facility (STF), known to Biffa as Soil Repair Centre (SRC), to the permitted Landfill site. The permitted activities include:

- 5.3 Part A(1)(a)(vi) - recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving recycling or reclamation of inorganic materials other than metals or metal compounds
- S5.3 A(1)(a)(i): Disposal of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.
- S5.6 A(1)(a): Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.
- S5.4 A(1)(b)(i): Recovery and disposal of non-hazardous waste soils with a capacity exceeding 75 tonnes per day involving biological treatment.

The facility will be developed on a phased basis as proposed on Drawings SG 3/1 to SG 3/3.

The soil treatment area would be located on top of the completed stable non-reactive hazardous waste cell (asbestos cell). The area has been completed with inert waste and asbestos materials only and as such no general waste has been deposited in this area. The treatment pad would extend beyond the asbestos cell. However, this area has not been filled with general waste yet and would be infilled with inert materials only to create the development platform for the treatment pad. The treatment pad for the SRC would therefore not be subject to differential settlement.

Hazardous waste will be accepted at the SRC for bioremediation. Non-hazardous waste will also be accepted on site and used as an additive in the bioremediation process.

The SRC will comprise of a single lined pad orientated in north south direction and will measure approximately 48.8m in length and 25m in width (Phase 1) to 94.5m in length by 50.7m in width (Phase 3).

The treatment pad surface will be engineered and will be provided with an impermeable surface with a sealed drainage system.

The biopile treatment process will use biological remediation over a period of time to reduce the level of contaminants within the soils to concentrations where the soil can be reused.

Schedule 1 to this notice summarises the changes we have made to this permit.

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

Status log of the permit		
Description	Date	Comments
Application received BJ9339	Duly made 29/12/00	Application for disposal by landfill of degradable household, industrial and commercial waste. EPR reference EPR/BJ9339IF/A001
Permit determined BJ9339	13/07/01	Original permit issued to Biffa Waste Services Limited. EPR reference EPR/BJ9339IF
Application BS4626 (billing ref BJ9339IF)	Duly made 30/05/02	Redesign of engineering and lining works and new groundwater risk assessment. EPR reference EPR/BJ9339IF/V002
Variation determined BS4626 (billing ref BS4626IQ)	02/12/02	Permit varied and consolidated. Effective from 03/12/02 EPR reference EPR/BJ9339IF/V002
Application BX6499	Duly made 18/03/2002	Redesign for engineering and lining works EPR reference EPR/BJ9339IF/V003
Variation determined BX6499 (billing ref BX6499ID)	13/08/04	Permit varied and consolidated. Effective from 18/08/04
Application TP3032	Duly Made 07/05/04	Variation to bring the installation in line with the requirements of the Landfill Directive and the Landfill (England and Wales) Regulations 2002 EPR reference EPR/BJ9339IF/V004
Variation determined TP3032 (billing ref TP3032PJ)	24/02/05	Permit varied and consolidated.

Status log of the permit		
Application AP3230	Duly Made 21/11/05	Leachate treatment plant and re-contouring of the waste EPR reference EPR/BJ9339IF/V005
Variation determined AP3230 (billing ref AP3230LQ)	31/03/06	Varied permit issued.
Application EPR/BJ9339IF/V006	Duly Made 15/03/08	Variation to update permit to comply with EPR.
Variation determined EPR/BJ9339IF/V006 (billing ref JP3236LD)	30/09/08	Varied and consolidated permit issued in EP condition format.
Application EPR/BJ9339IF/V007 (billing ref KP3939KV)	Duly Made 09/12/08	Variation to update the permit to modern conditions.
Variation determined EPR/BJ9339IF/V007	01/06/10	Varied and consolidated permit issued in modern condition format.
Application EPR/BJ9339IF/V008	Duly Made 01/12/09	Administrative variation to amend leachate monitoring requirements, Table S4.10.
Variation determined EPR/BJ9339IF/V008 (billing ref MP3931KS)	06/01/10	Varied permit issued.
Application EPR/BJ9339IF/V009	Duly Made 01/07/10	Variation to add waste type 20 01 99 with specific limitations on the source of the waste
Variation determined EPR/BJ9339IF/V009 (billing ref CP3437TL)	15/07/10	Varied permit issued.
Application EPR/BJ9339IF/V010	Duly Made 03/09/12	Variation to remove the waste codes and conditions relating to asbestos wastes and construction materials containing asbestos.
Variation determined EPR/BJ9339IF/V010 (billing ref ZP3133ZA)	16/10/12	Varied permit issued.
Agency variation determined EPR/BJ9339IF/V011 (billing ref PP3233NJ)	24/05/13	Agency variation to implement the changes introduced by Industrial Emissions Directive.
Application EPR/BJ9339IF/V012	Duly Made 25/10/13	Application to vary permit to add sixth engine to installation.
Variation determined EPR/BJ9339IF/V012 (billing ref UP3935EC)	09/01/14	Varied permit issued.

Status log of the permit		
Application EPR/BJ9339IF/V013 (variation and consolidation)	Duly made 10/04/14	Application to add soil treatment facility and update the permit to modern conditions.
Response to Schedule 5 Notices	27/06/14 21/07/14	Response to questions 1 to 15. Response to questions 1 to 3
Variation determined EPR/BJ9339IF/V013 (Billing ref WP3731NF)	28/08/14	Varied permit issued under the consolidated permit EPR/BJ9339IF/V014.
Environment Agency Landfill Sector Review 2013 Permit reviewed Variation determined EPR/BJ9339IF/V014 Permit EPR/BJ9339IF (Billing ref BP3234VA)	28/08/14	Varied and consolidated permit issued in modern condition format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

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

permit number
EPR/BJ9339IF

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 regulated facilities at

Skelton Grange Landfill Site
Biffa Waste Services
Pontefract Lane
Newsam Green
Leeds
LS15 9AD

to the extent set out in the schedules.

The notice shall take effect from 28/08/2014

Name	Date
Claire Roberts	28/08/2014

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit ERP/BJ9339IF/V014.

The following conditions were varied as a result of an Environment Agency initiated variation, ERP/BJ9339IF/V014:

The following table summarises the latest changes to the landfill permit template, however your permit may contain more changes than this where your permit has not been varied to recent template conditions.

Condition	Description of change
1.5	Generic condition to reflect the requirements of the Waste Framework Directive.
2.7.1(a)	Added reference to a specific table to clarify what wastes are permitted by which permitted activity.
2.7.3	Added to separately identify the waste types and quantities that can be accepted for restoration.
2.10	Revised gas management condition imposed for all landfills.
3.1.1	Generic condition imposed on all activities to simplify sub-conditions
3.1.4 to 3.1.5	Revised conditions to reflect the terminology used by the Groundwater Directive for 'hazardous substances' and to require hydrogeological risk assessment reviews are submitted every 6 years rather than every 4 years.
	Sub-condition that referred to emission of 'non-hazardous pollutants' deleted. Such emissions are regulated by condition 3.2.
	Two sub-conditions that referred to limits in specific tables in schedule 3 deleted as they are now covered by 3.1.1.
3.6	Revised generic pests condition imposed on all activities.
4.2.2	Amended to ensure that information on 'annual production/ treatment' (Schedule 4, Table S4.2) is provided in February each year where annual reports may be submitted at other times of the year.
4.2.2(a)	Text expanded to clarify the details we require in an annual report.
4.2.2(h)	New condition requiring annual submission of a plan of monitoring and extraction locations with reference to monitoring tables in schedule 3
4.3.1	Generic notifications condition added.
Schedules	
Table S1.1	Amended description of the landfill activity to clarify that this includes restoration. Activity references amended to reflect changes introduced by Industrial Emissions Directive (2010/75/EU).
	Leachate storage moved from a specified activity to Directly Associated Activities.
Table S1.3	IP1 added to ensure that approved restoration plan is in place for the site
Table S1.5	Amended to clarify that restoration is a separate part of the activity unrelated to landfill cover.
Schedule 2	Standard list of wastes added.
Schedule 3	Monitoring and compliance tables have been re-ordered so that those with compliance limits appear first. Standard monitoring frequency and parameters have been included for certain routine monitoring requirements

Table S4.1	Amended to only require regular reports of information that relate to compliance limits.
Table S4.2	Additional details of landfill gas extracted required to improve climate change data quality.
Table S4.3	Amended to include natural gas as an energy source for consistency with other sectors.
Schedule 6	Definitions added to clarify meaning of: <ul style="list-style-type: none"> • Inert waste • Exceeded • Hazardous substance • Medicinal product • Previous year • Waste acceptance criteria • Waste acceptance procedure

The following conditions were varied as a result of the application made by the operator, ERP/BJ9339IF/V013:

Condition	Description of change
2.1.2	Added to distinguish wastes permitted for Soil Treatment Facility (STF)
2.3.3	Added to specify raw material for bioremediation
2.3.4	Added to specify how hazardous waste accepted at the STF will be managed.
2.7.2	Added to allow the receipt of waste for treatment at the STF.
2.7.11	Added to specify how waste from STF will be managed.
2.7.12	Added to specify how residual waste from STF will be managed.
3.1.6	Generic condition to reflect the requirements of the IED.
3.5.1 (g)	Added to specify monitoring requirement for the STF.
3.5.1 (h)	Added to specify monitoring requirement for the STF.
4.3.6	Notification requirement for the STF.
Schedules	
Table S1.4	Pre-operational measures, 3 to 9, added to request additional information from the operator.
Table S2.3	Hazardous waste types and quantities permitted for soil treatment facility.

Table S2.4	Non-hazardous waste types and quantities permitted for soil treatment facility.
Table S3.2	Amended to add monitoring requirement for STF.
Table S3.13	Process monitoring requirements for STF.
Table S3.14	Monitoring requirements for bioremediation of contaminated soil.
Table S4.2	Amended to add reporting for Annual production/treatment for STF.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/BJ9339IF

This is the consolidated permit referred to in the variation and consolidation notice for application **EPR/BJ9339IF/V013** 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

Skelton Grange Landfill Site
Biffa Waste Services
Pontefract Lane
Newsam Green
Leeds
LS15 9AD

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

Name	Date
Claire Roberts	28/08/2014

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

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

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

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

1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 24th February 2005 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by condition 1.2.1; and
- (c) the estimated costs for the closure and aftercare of the landfill.

1.3 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 For the following activities referenced in schedule 1, table S1.1 (A1 to A6) 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").

2.1.2 For the following activities referenced in schedule 1, table S1.1 (A3 to A6 & A13) waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 For the following activities referenced in schedule 1, table S1.1 (A3 to A6) any raw materials or fuels listed in schedule 2 table S2.2 shall conform to the specifications set out in that table.

Hazardous waste storage and treatment

- 2.3.4 For the following activities referenced in schedule 1, table S1.1 (A3 to A5) hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

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

2.6 Landfill Engineering

- 2.6.1 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) 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 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) 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 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) 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 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) no disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.6.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.6.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
 - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.7 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.6.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.5 and 2.6.6 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.9 For the purposes of conditions 2.6.1, 2.6.2, 2.6.4 and 2.6.5, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
 - (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.
- 2.6.10 Where the Environment Agency has required further information under condition 2.6.9(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
 - (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.

2.7 Waste acceptance

- 2.7.1 For the following activities referenced in schedule 1, table S1.1 (A1) wastes shall only be accepted for disposal if:
 - (a) they are listed in schedule 2, table S2.2 and
 - (b) they are non- hazardous waste and
 - (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm), and
 - (d) they are not shredded used tyres, and
 - (e) they are not liquid waste (including waste waters but excluding sludge), and

- (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
 - (g) all the relevant waste acceptance procedures have been completed, and
 - (h) they fulfil the relevant waste acceptance criteria, and
 - (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
 - (j) they are wastes which have been treated, except for: inert wastes for which treatment is not technically feasible; or it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment, and
 - (k) where they are wastes with a code beginning with 07 05 and 16 03, they shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture.
- 2.7.2 For the following activities referenced in schedule 1, table S1.1 (A3 to A6 & A13) waste shall only be accepted for treatment if:
- (a) it is of a type and quantity listed in schedule 2, table(s) S2.3 and S2.4; 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 S2.5 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 (A1) the operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
 - (b) waste at the point of deposit;
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.7.5 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.
- 2.7.6 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.7.7 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing SD233500.
- 2.7.8 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.

- 2.7.9 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) 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.
- 2.7.10 The operator shall maintain and implement a system to record the disposal location of any hazardous waste.
- 2.7.11 For the following activities referenced in schedule 1, table S1.1 (A3 to A6 & A13) the operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.7.12 For the following activities referenced in schedule 1, table S1.1 (A3 to A6 & A13) the operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.8 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 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) 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 For the following activities referenced in schedule 1, table S1.1 (A7) compliance with an emission limit in table S3.2 shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.
- 3.1.4 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.5 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
 - (a) between nine and six months prior to the fourth anniversary of the granting of the permit, and
 - (b) between nine and six months prior to every subsequent six years after the fourth anniversary of the granting of the permit.
- 3.1.6 For the following activities referenced in schedule 1, table S1.1 (A3 to A6.), periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

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

3.3 Odour

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

3.4 Noise and vibration

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

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:
- (a) Leachate specified in tables S3.1 and S3.11;
 - (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) Particulate matter specified in table S3.7.
 - (g) Process monitoring specified in Table S3.13; and
 - (h) Soil biopile monitoring specified in Table S3.14.

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 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) a topographical survey of the site referenced to ordnance datum shall be carried out:

- (a) annually, and
- (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
- (a) following closure of the landfill or part of the landfill.

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

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

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

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) the results of groundwater monitoring;
 - (ii) sub-surface landfill gas monitoring;
 - (iii) leachate levels, quality and quantities;
 - (iv) landfill gas generation and collection;
 - (v) waste types and quantities;
 - (vi) the location of hazardous waste deposits; and
 - (vii) the specification and as built drawings of the basal, sidewall and capping engineering systems.
 - (viii) off-site environmental effects; and
 - (ix) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send 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;
 - (e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
 - (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
 - (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
 - (h) a plan(s) ('the monitoring and extraction point plan - MEPP') showing the locations of leachate and landfill gas extraction and all monitoring points.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4, table S4.1;
 - (b) using the forms specified in schedule 4, table S4.4 or other reporting format as agreed in writing with the Environment Agency; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

- 4.2.4 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.
- 4.2.5 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

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

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

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

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

4.3.6 For the following activities referenced in schedule 1, table S1.1 (A3 to A6 and A13) the Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	D5 –Specially engineered landfill 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	<p>Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.</p> <p>Waste types for restoration, as specified in table S2.5, to be agreed in accordance with IP1, Table S1.3.</p>
A2	D5 –Specially engineered landfill	Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for Stable Non Reactive Hazardous Waste	No waste permitted as cell is full.
A3	R5 - Recycling/reclamation of inorganic materials other than metals and metal compounds.	S5.3 Part A(1)(a)(vi): Recovery of hazardous waste with a capacity exceeding 10 tonnes per day.	Ex-situ bioremediation of hazardous waste from soil origin.	<p>All treatment must take place on an impermeable surface with sealed drainage within the land edged in blue which is within the area edged in green on the site plan at schedule 7.</p> <p>The biopile gas extraction system must be operational during treatment.</p> <p>Hazardous wastes treated on site will only be used for landfill restoration within the green boundary outlined at schedule 7 of the permit.</p> <p>Waste types as specified in table S2.3.</p>

Table S1.1 activities

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A4	D 8 - Biological treatment of hazardous waste.	S5.3 Part A(1)(a)(i): Disposal of hazardous waste with a capacity exceeding 10 tonnes per day.	Ex-situ bioremediation of hazardous wastes from non-soil origin.	<p>All treatment must take place on an impermeable surface with sealed drainage within the land edged in blue which is within the area edged in green on the site plan at schedule 7.</p> <p>The biopile gas extraction system must be operational during treatment.</p> <p>Sludges from non-soil origin treated on site will only be used for landfill daily cover within the green boundary outlined at schedule 7 of the permit.</p> <p>Waste types as specified in table S2.3.</p>
A5	<p>R13 - Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection on the site where it is produced).</p>	S5.6 Part A(1)(a): Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.	Temporary storage of hazardous waste pending submission to bioremediation.	<p>All storage must take place on an impermeable surface with sealed drainage within the land edged in blue which is within the area edged in green on the site plan at schedule 7.</p> <p>Waste types as specified in table S2.3.</p>
A6	<p>R5 - Recycling/reclamation of other inorganic compounds.</p> <p>D 8 - Biological treatment of non-hazardous waste.</p>	S5.4 Part A(1)(b)(i): Recovery and disposal of non-hazardous waste soils with a capacity exceeding 75 tonnes per day involving biological treatment.	Ex-situ biological treatment consisting of bioremediation of non-hazardous waste soils.	All treatment and storage must take place on an impermeable surface with sealed drainage within the land edged in blue which is within the area edged in green on the site plan at

Table S1.1 activities

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
				schedule 7.
				The biopile gas extraction system must be operational during treatment.
				Any blending or mixing of non-hazardous waste is only permitted provided it is in line with an approved blending and mixing methodology as set out in pre-operational condition PO3, table S1.4.
				Non-hazardous wastes from soil origin treated on site shall be used for landfill restoration within the green boundary outlined in schedule 7 of the permit.
				Sludges from non-soil origin treated on site shall be used for landfill daily cover within the green boundary outlined in schedule 7 of the permit.
				Wastes types as specified in table S2.4.

Directly Associated Activity

A7	R1 - Use of waste principally as a fuel to generate energy.		Utilisation of landfill gas for energy recovery in an appliance with a rated thermal input <50 MW.	Utilisation of landfill gas arising from the landfill.
A8	D8 – Biological treatment of landfill leachate		Treatment of leachate in a facility with a capacity of <50 t/day	Leachate arising from the landfill.
A9	N/A		Temporary storage of landfill leachate	Leachate arising from the landfill.

Table S1.1 activities

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A10	N/A		Discharge of treated leachate from the leachate treatment facility to foul sewer.	Leachate management system to point of entry to sewer.
A11	N/A		Flaring of landfill gas for disposal in an appliance	Landfill gas arising from the landfill.
A12	D6 – release into a water body except seas/ oceans		Discharges of site drainage from the landfill	From surface water management system to point of entry to controlled waters.
A13	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).		Temporary storage of non-hazardous waste pending recovery prior to submission to A6 activity.	All storage must take place on an impermeable surface with sealed drainage within the land edged in blue which is within the area edged in green on the site plan at schedule 7. Waste types as specified in tables S2.4.

Table S1.2 Operating techniques

Description	Parts	Date Received
Application BJ9339IF	The response to questions, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Form	06/05/2004
Schedule 4 response in connection with the mono cell for asbestos waste	All	07/09/2004
Letter received in connection with landfill gas issues	All	07/10/2004
Letter received in connection with the waste types to be accepted at the installation	All except the list of waste types under the title 'Waste for Acceptance in Future Stable Non Reactive Hazardous Waste Cells'.	11/01/2005
Final report detailing periodic assessment and necessary treatment with respect to infestations of mosquitoes	Final report was approved on 24/05/2006 to meet the requirements of improvement condition 8. Report number B6602/R1/Rev 3 dated February 2006.	29/03/2006
Groundwater contingency action plan	Action Plan approved on 28/02/2006 to meet the requirements of improvement condition 12.	18/05/2005

Table S1.2 Operating techniques		
Description	Parts	Date Received
Surface water management plan	Surface water management plan approved on 05/06/2006	18/05/2005
Site Monitoring Plan	Site monitoring plan approved on 30/05/2006 to meet the requirements of improvement condition 16	24/05/2005
Flood risk assessment including measures necessary to prevent the installation from flooding	Risk assessment approved on 29/09/2005 to meet the requirements of improvement condition 10.	24/08/2005
Litter Management Plan 2011	All	08/02/2011
Application EPR/BJ9339IF/V012	Parts C2 and C3 of the application and all referenced supporting documentation.	25/10/2013
Application EPR/BJ9339IF/V013	<p>Responses to Sections 3b, 3c, 3d, 4, and 5b of the application form Part C2</p> <p>Sections 2.3 and 2.4 of the Non-technical summary, 407.00034.00512/NTS, in response to section 5c, Part C2 of the application form.</p> <p>Sections 2.1, tables A1, A2 and A3 of the H1 Environmental Risk Assessment, 407.00034.00512/H1, in response to section 6, Part C2 of the application form.</p> <p>Sections 2, 3 (excluding reference to crushing and screening in section 3.5.1) and 4 of the Best Available Techniques and Operating Techniques document, 407.00034.00512/BATOT, in response to section 3, Part C3 of the application form.</p>	10/04/2014
Response to Schedule 5 Notice dated 28/05/14	<p>Response to questions on:</p> <ul style="list-style-type: none"> • proportion of green waste (additives) that will make up the biopile • version 5 of IPPC S5.06 • installation of treatment pad • control of VOCs and odour • management of process water • Packaging waste • Waste acceptance / contaminant threshold • Risk to water environment • Containment bund • Leak detection 	27/06/2014
Response to Schedule 5 Notice dated 07/07/14	<p>Responses to questions on:</p> <ul style="list-style-type: none"> • soil washing and export of waste offsite • mixing and blending of wastes • Proposed waste types • Flow diagram for sludge treatment 	21/07/2014

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IP1	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 (2.7.3).	28/11/2014

Table S1.4 Pre-operational measures

Reference	Pre – operational measures
PO1	6 months prior to the operation of the leachate treatment plant the operator shall submit for approval a report and updated Site Monitoring Plan to the Agency for approval detailing the location and final design (including CQA details and Quality Management System procedures for inspection, maintenance, monitoring and emergency situations) of the Effluent Treatment Plant, its associated infrastructure i.e. leachate collection tank, discharge balancing tank and emergency tanker point, all emission points and contingency plans. Details of the sewer connection and maintenance program for the sewer shall also be submitted for approval.
PO2	Following submission of the report required by pre-operational measure 1, the operator shall submit any measures approved in writing by the Agency to the timescales indicated in the approval. A written notification of completion shall be submitted to the Agency following full implementation of the approved measures.
PO3	Prior to blending or mixing of non-hazardous wastes the operator shall submit a methodology for the blending and mixing of the wastes to the Environment Agency for written approval. The mixing and blending of non-hazardous waste shall not commence until the Environment Agency has approved the methodology.
PO4	At least 1 month prior to any treated waste material at the Soil Treatment Facility (STF) being sent for landfill restoration, the operator, while taking into account the proposed land use after landfilling, shall submit to the Agency for approval a detailed quantitative risk assessment demonstrating that all waste material designated for reuse/recycling/reclamation is: <ul style="list-style-type: none"> • suitable for its intended purpose; • forms part of the landfill restoration scheme; and • meets the site specific assessment criteria derived for the landfill restoration as contained in an approved restoration plan. Waste shall not be deposited at the site for restoration until the risk assessment has been agreed by the Environment Agency in writing.
PO5	At least 1 month prior to sending any waste treated at the STF for use as daily cover, the operator shall submit a report to the Environment Agency which demonstrates that the treated waste meets the landfill waste acceptance criteria. Waste from the STF shall not be used for daily cover until the report has been agreed by the Environment Agency in writing.

Table S1.4 Pre-operational measures	
Reference	Pre – operational measures
PO6	<p>The construction of the treatment pad shall not commence until the Operator has submitted a detailed construction proposal and the Environment Agency has confirmed that it is satisfied with the construction proposals. The construction shall take place only in accordance with the approved construction proposals unless:</p> <ol style="list-style-type: none"> any change to the approved construction proposals would have no impact on the performance of any element of the design; or a change has otherwise been agreed in writing by the Environment Agency. <p>The construction plan shall include:</p> <ol style="list-style-type: none"> an assessment of the impact the construction and work equipment will have on the landfill cap and the underlying asbestos cell. the specification of any materials used in the proposals sufficient information to demonstrate the proposals are in accordance with the relevant Environment Agency and CIRIA guidance documents. Details of third party supervision of the construction process including the qualification of the supervising person.
PO7	<p>The Operator shall submit a CQA Validation Report to the Environment Agency as soon as practicable following the construction of the treatment pad. The report shall demonstrate that materials used have been supplied and installed in accordance with the design specification set out in the construction proposal.</p> <p>The report shall include a comprehensive record of the construction and must include, where relevant:</p> <ul style="list-style-type: none"> 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 third party supervising the site engineer’s daily records; Records of any problems or non-compliance and the solution applied; Any other site specific information considered relevant to proving the integrity of the construction. Validation by a qualified person that all of the construction has been carried out in accordance with the construction proposals.
PO8	<p>At least 1 month prior to commencement of each phase of the operation at the STF as illustrated on Drawings SG 3/1 to SG 3/3 the operator shall submit to Environment Agency a report demonstrating that the necessary procedures as detailed in the application document, 407.00034.00512/BATOT and other relevant documents, are in place for the operation of the phase.</p>
PO9	<p>The operator shall review all risk assessments, management systems and procedure for wastes being accepted, treated and stored at the soil treatment facility.</p> <p>This review shall ensure that appropriate measures are taken when accepting, handling and storing the wastes, ensuring that all emissions are prevented, in line with Environment Agency guidance SGN 5.06. The Operator shall write to the Environment Agency to confirm that this review has been undertaken prior to the acceptance of waste at the soil treatment facility.</p>

Table S1.5 Annual waste input limits to the area edged in green on the site plan in Schedule 7 of this permit

Category	Limit Tonnes/ Year
Non-hazardous waste	575,000
Inert waste	50,000
Waste for restoration	To be agreed in accordance with IP1, Table S1.3.
Total	625,000

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
Additives (bacterial growth and promotion)	1% of the total waste mass

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
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 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
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 05	de-inking sludges from paper recycling

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 09	lime mud waste
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
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
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
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
07	WASTES FROM ORGANIC CHEMICAL PROCESSES
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	wastes containing silicones other than those mentioned in 07 02 16
08	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01	wastes from MFSU and removal of paint and varnish
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 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 waterproofing 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 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
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)

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 24	sands from fluidised beds
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 04	other particulates and dust
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 04	other particulates and dust
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
10 08	wastes from other non-ferrous thermal metallurgy
10 08 04	particulates and dust
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 14	glass-polishing and –grinding sludge other than those mentioned in 10 11 13
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
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

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
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
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
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 02	wastes from electrical and electronic equipment
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 03	off-specification batches and unused products
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 02 03	plastic

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	insulation materials and asbestos-containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 03	stabilised/solidified wastes ¹
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 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 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 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber

¹ 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.

Table S2.2 Permitted waste types for disposal in the landfill for non-hazardous waste

Waste code	Description
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
20 01 99	other fractions not otherwise specified - comprising human and animal 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 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

Table S2.3 Permitted waste types and quantities for soil treatment facility

Maximum quantity	The total quantity of waste accepted at the site for A3, A4, A5, A6 and A13 activities, as specified in Table S1.1, shall be less than 30,000 tonnes per year Exclusions: <ul style="list-style-type: none"> No liquid waste Sludges comprising of mixtures of soil and water shall be separately treated in a unique batch and shall be used for landfill restoration subject to meeting site specific quality targets. Sludges comprising of process wastes from non-soil origins shall be treated in a separate batch, shall not be mixed with soil based sludges and shall only be used as daily cover subject to meeting site specific quality targets and waste acceptance criteria.
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 05	drilling muds and other drilling wastes
01 05 05*	oil-containing drilling muds and wastes
01 05 06*	drilling muds and other drilling wastes containing dangerous substances
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
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 dangerous substances
17 05 05*	dredging spoil containing dangerous substances
17 05 07*	track ballast 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 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 05*	sludges from physico/chemical treatment containing dangerous substances
19 03	stabilised/solidified wastes
19 03 06*	waste marked as hazardous, solidified – only to be accepted if prior to solidification they did not possess a hazardous property derived from dangerous substances other than oil derived hydrocarbons and were solidified by a permitted process using non-reacting binders such as clay.
19 08	wastes from waste water treatment plants not otherwise specified
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing dangerous substances
19 13 03*	sludges from soil remediation containing dangerous substances

Table S2.4 Permitted waste types and quantities for soil treatment facility

Maximum quantity	<p>The total quantity of waste accepted at the site for A3, A4, A5, A6 and A13 activities, as specified in Table S1.1, shall be less than 30,000 tonnes per year.</p> <p>No more than 1,500 tonnes per year of non-hazardous biodegradable waste, including garden and park wastes (including cemetery waste), wood from separately collection fractions of municipal waste and wood from the mechanical treatment of waste shall be accepted at the site.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • No liquid waste • Sludges comprising of mixtures of soil and water shall be separately treated in a unique batch and shall be used for landfill restoration subject to meeting site specific quality targets. • Sludges comprising of process wastes from non-soil origins shall be treated in a separate batch and will not be mixed with soil based sludges and shall only be used as daily cover subject to meeting site specific quality targets and waste acceptance criteria.
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 09	waste sand and clays
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
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 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
19	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	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 03	waste marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06 – only to be accepted if prior to solidification they did not possess a hazardous property derived from dangerous substances other than oil derived hydrocarbons and were solidified by a permitted process using non-reacting binders such as clay.
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 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
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 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 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
20 03	other municipal wastes
20 03 03	street cleaning residues

Table S2.5 Permitted waste types accepted for restoration

Waste code	Description
To be agreed in accordance with IP1, Table S1.3.	

Schedule 3 – Emissions and monitoring

Table S3.1 Leachate level limits and monitoring requirements			
Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring standard and method
Operational Cells or Phases (Any cells or phases that do not have a final engineered cap agreed in accordance with condition 2.6)			
Leachate compliance points Cell 1 – Leachate Risers 1A/1B/1C Cell 2 – Leachate Risers 2A/2B Cell 3 – Leachate Risers 3A/3B Cell 4 – Leachate Risers 4A/4B Cell 5 – leachate Risers 5A/5B Cell 6 – Leachate Risers 6A/6B shown on plan SD323902 revised 13/08/13	1m above cell base	Monthly	As specified in Environment Agency Guidance TGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed with the Agency as part of a leachate monitoring plan.
Non Operational Cells or Phases (Any cells or phases that have a final engineered cap agreed in accordance with condition 2.6)			
Leachate compliance points	1m above cell base	Quarterly	As specified in Environment Agency Guidance TGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed with the Agency as part of a leachate monitoring plan.

Table S3.2 Point source emissions to air – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Flare 1 & Flare 2 stacks (permanent) located in Landfill Gas Management Compound on plan SD232902 revised 13/08/13	Oxides of Nitrogen	Landfill Gas Flares	150 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency. Monitoring is unnecessary where the flare is active for <10% of the year.
	CO		50 mg/m ³			
	Total VOCs		10 mg/m ³			
Engine (ENG2) commissioned before 31 st December 2005, located in Landfill Gas Management Compound shown on plan SD232902 revised 13/08/13	Oxides of Nitrogen, expressed as NO ₂	Gas utilisation plant	650 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency
	Carbon Monoxide		1500 mg/m ³			
	Total volatile organic compounds (VOC), expressed as Carbon		1750 mg/m ³			
Engines (ENG1, ENG3, ENG4, ENG5 and ENG6) commissioned after 31 st December 2005, located in Landfill Gas Management Compound shown on plan SD232902.	Oxides of Nitrogen, expressed as NO ₂	Gas utilisation plant	500 mg/m ³	Hourly mean	Annually	
	Carbon Monoxide		1400 mg/m ³			
	Total volatile organic compounds (VOC), expressed as Carbon		1000 mg/m ³			
Biofilter as reference in drawing SG 3/1 reference SD234000	VOCs BTEX PAHs TPH	Biofilter	--	Hourly mean	Monthly	

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

Monitoring point ref & location	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Points B, D & E located on drawing number SD232902					
93804002 – Discharge – B	Ammoniacal Nitrogen	5.9mg/l	Spot Sample	Monthly	Monitoring to be carried out in accordance with Environment Agency Guidance Document 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)', unless otherwise agreed in writing with the Agency.
93804004 – Culvert – E	Ammoniacal Nitrogen	2.9mg/l			
93804006 – Culvert – D	Ammoniacal Nitrogen	4.6mg/l			
93804002 – Discharge – B	Chloride	314mg/l	Spot Sample	Monthly	
93804004 – Culvert – E	Chloride	115mg/l			
93804006 – Culvert – D	Chloride	314mg/l			
93804002 – Discharge – B	Suspended Solids	100mg/l	Spot Sample	Quarterly	
93804004 – Culvert – E					
93804006 – Culvert – D					
93804002 – Discharge – B	PH	6 to 9	Spot Sample	Quarterly	
93804004 – Culvert – E					
93804006 – Culvert – D					
93804002 – Discharge – B	Visible Oil	No visible oil	Complete	Quarterly	
93804004 – Culvert – E					
93804006 – Culvert – D					

Table S3.4 Groundwater – emission limits and monitoring requirements

Monitoring point reference (Borehole)	Parameter	Limit (including unit) mg/l	Reference Period	Monitoring Frequency	Monitoring standard or method
93802017 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	1.8	Spot Sample	Monthly	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 J, version 2, April 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Chloride	128		Quarterly	
	Chromium	0.019			
	Copper	0.055			
	Iron	44.6			
	Zinc	0.108			
93802021 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	1.8	Spot Sample	Monthly	
	Chloride	814		Quarterly	
	Chromium	0.026			
	Copper	0.132			
	Zinc	0.26			
93802023 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	2.4	Spot Sample	Monthly	
	Chloride	172		Quarterly	
	Chromium	0.014			
	Copper	0.032			
	Iron	58.4			
	Zinc	0.113			
93802025 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	2.4	Spot Sample	Monthly	
	Chloride	181		Quarterly	
	Chromium	0.026			
	Copper	0.156			
	Iron	73.7			
	Zinc	0.28			
93802027 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	2.4	Spot Sample	Monthly	
	Chloride	769		Quarterly	
	Chromium	0.020			
	Copper	0.037			
	Zinc	0.13			
93802028 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	2.88	Spot Sample	Monthly	
	Chloride	120		Quarterly	
	Chromium	0.024			
	Copper	0.052			

Table S3.4 Groundwater – emission limits and monitoring requirements					
Monitoring point reference (Borehole)	Parameter	Limit (including unit) mg/l	Reference Period	Monitoring Frequency	Monitoring standard or method
	Iron	54.8			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 J, version 2, April 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Zinc	0.15			
93802030 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	3.2	Spot Sample	Monthly	
	Chloride	104		Quarterly	
	Chromium	0.031			
	Copper	0.083			
	Iron	68			
	Zinc	0.18			
93802032 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	4.08	Spot Sample	Monthly	
	Chloride	854		Quarterly	
	Chromium	0.043			
	Copper	0.092			
	Iron	42.5			
	Zinc	0.216			
93802033 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	5.76	Spot Sample	Monthly	
	Chloride	122		Quarterly	
	Chromium	0.024			
	Copper	0.082			
	Iron	56.7			
	Zinc	0.14			
93802035 on plan SD232902 revised 13/08/13	Ammoniacal Nitrogen	5.76	Spot Sample	Monthly	
	Chloride	116		Quarterly	
	Chromium	0.016			
	Copper	0.041			
	Iron	64.6			
	Zinc	0.116			

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

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
Gas monitoring boreholes: 93801001, 93801002, 93801003, 93801009, 93801010, 93801011, 93801012, 93801014, 93801015, 93801016, 93801018, 93801019, 93801020, 93801022, 93801024, 93801026, 93801029, 93801031, 93801034, 93801036, 93801037, 93801038, 93801039, 93801040, 93801041, 93801043, 93801044, 93801045, 93801046, 93801047 identified on drawing SD232902 revised 13/08/13.	Methane	1.0 % v/v	monthly	As per LFTGN03 (September 2004) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Record whether the ground is: <ul style="list-style-type: none"> • waterlogged • frozen • snow covered
	Carbon Dioxide	no limit		
	Oxygen	no limit		
	Atmospheric Pressure	no limit		
93801004 as referenced in drawing SD232902 revised 13/08/13.	Methane	1.1 % v/v	monthly	
	Carbon Dioxide	no limit		
	Oxygen	no limit		
	Atmospheric Pressure	no limit		
93801006, as referenced in drawing SD232902 revised 13/08/13.	Methane	1.5 % v/v	monthly	
	Carbon Dioxide	no limit		
	Oxygen	no limit		
	Atmospheric Pressure	no limit		
93801007, as referenced in drawing SD232902 revised 13/08/13.	Methane	1.6 % v/v	monthly	
	Carbon Dioxide	no limit		
	Oxygen	no limit		

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

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
	Atmospheric Pressure	no limit		
93801008 as referenced in drawing SD232902 revised 13/08/13.	Methane	2.0 % v/v	monthly	
	Carbon Dioxide	no limit		
	Oxygen	no limit		
	Atmospheric Pressure	no limit		

Table S3.6 Point source emissions to sewer, effluent treatment plant or by tankering or other transfer off-site– emission limits and monitoring requirements

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Weight Limit	Reference Period	Monitoring Frequency	Monitoring Standard or Method
In accordance with pre-operational condition 1	Ammonia	Main Process Effluent	50mg/l	5kg	Spot sample	Daily	In accordance with the Agency guidance document M18 'Monitoring of discharges to Water and Sewer', unless otherwise agreed in writing with the Agency.
	Cadmium		5ug/l	182g		Annually	
	Chromium		4mg/l			Note 1	
	COD (settled)		5000mg/l	250kg		Daily	
	Copper		2mg/l			Note 1	
	Cyanide		2mg/l				
	Lead		2mg/l				
	Mercury		1ug/l	36.5g		Annually	
	Nickel		3mg/l				
	PH		6 to 10			Note 1	
	Sulphide		1mg/l				
	Suspended Solids		500mg/l				
	Zinc		2mg/l				

Note 1 - Frequencies to be determined in accordance with pre-operational condition 1

Table S3.7 Particulate matter in ambient air - limits and monitoring requirements					
Monitoring Point Ref. /Description	Parameter	Limit (Including Unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
MEPP SD232902.	PM ₁₀	40µg/m ³ - annual mean. 50µg/m ³ - 24 hour mean, not to be exceeded >35 times per year.	Continuous (or as agreed in writing with the Agency)	Quarterly	In accordance with Agency Guidance 'M17 - Monitoring of Particulate Matter in ambient air around waste facilities), or any subsequent guidance.
Monitored at three locations: haul road, working area & tipping face.	Dust	200mg.m ⁻² .day ⁻¹	Continuous	Monthly	

Table S3.8 Landfill gas emissions from capped surfaces – monitoring requirements			
Monitoring point Ref. /description	Parameter	Monitoring frequency	Monitoring Standard or method
Permanently capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Temporarily capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Whole site	Total methane emission	As agreed with the Environment Agency	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Uncapped areas	Methane concentration	Every 12 months	As agreed with the Environment Agency based on the wording of revised LFTGN 07 (v2 2010) or landfill sector guidance or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Table S3.9 Groundwater – other monitoring requirements			
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 J, version 2, April 2010, or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	
	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 J, version 2, April 2010, 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 operator shall also undertake a full leachate hazardous substances screen.
	total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	
	Hazardous substances detected in leachate	Annually for first six years of operation then every two years	
MEPP	Base of monitoring point (mAoD)	Annually	

Table S3.10 Landfill gas – other monitoring requirements

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In waste gas monitoring boreholes or sealed leachate wells or sacrificial gas extraction system	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly until gas extraction commences	Calibrated handheld monitoring instrument	For cells or phases which have no active gas extraction. Gas extraction system shall be installed and extraction commenced once monitoring shows onset of methane production in waste at a rate that can be sustainably extracted. Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring.
	Hydrogen sulphide	Quarterly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	For cells or phases which have no active gas extraction. Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring. Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans
Gas collection system at well control valve, manifolds (if applicable) and strategic points on gas system	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Gas flow rate or suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Monthly or at such other frequency as may be agreed in writing with the Environment Agency.	Calibrated handheld monitoring instrument	Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken. Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertake Record the ambient air temperature and whether the ground is: <ul style="list-style-type: none"> • waterlogged • frozen • snow covered

Table S3.10 Landfill gas – other monitoring requirements

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Gas collection system at well control valve	Hydrogen sulphide	Six monthly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 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
Input to flare or LFG Utilisation Compound	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 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.
Input to flare or LFG Utilisation Compound	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly		Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken.

Table S3.10 Landfill gas – other monitoring requirements				
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Flares 1 and Flare 2 shown on plan SD232902 revised 13/08/13	Temperature	As per LFTGN05 v2 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	
ENG1, ENG2, ENG3, ENG4, ENG5 and ENG6 Gas engines shown on plan SD232902 revised 13/08/13	NOx 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.

Table S3.11 Leachate – other monitoring requirements				
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Operational Cells or Phases (Any cell or phases that do not have a final engineered cap agreed in accordance with condition 2.6)			At leachate compliance point as listed in table S3.1.	None
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	As specified in Environment Agency Guidance TGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010, with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing with the Environment Agency.	
MEPP	Hazardous substances	Annually		None
MEPP	Depth to base (mAoD)	Annually		None

Table S3.11 Leachate – other monitoring requirements				
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Non Operational Cells or Phases (Any cell or phases that have a final engineered cap agreed in accordance with condition 2.6)				
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		

Table S3.12 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
All surface water monitoring points 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 J, version 2, April 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Table S3.13 Process monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
A1 – biofilter as shown on Drawing SG 3/1 referenced SD234000 (Proposed Site Layout)	<u>Temperature</u> <u>pH</u> <u>Moisture content</u> <u>Flow rate</u> <u>Nutrient levels</u> Contaminant elimination	monthly	N/A	Biofilter should be checked and maintained to ensure appropriate temperature and moisture content on a daily basis. Monitoring equipment shall be available on-site and used as required to ensure compliance with this permit.

Table S3.14 Other Monitoring requirements – contaminated soil

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Soil biopiles	Total Petroleum Hydrocarbons (TPH) Polycyclic Aromatic Hydrocarbons (PAH's) Pentachlorophenol (PCP) ^{Note 1} Total Volatile Organic Compounds (VOC's) Phenols pH	Each completed batch of treated soil shall be sampled	-	Laboratory must be accredited to EN ISO/IEC ISO17025:2000 for the analysis specified. Samples to be obtained using standard sampling procedures as per BS 812.
Note 1: Only if PCP contaminated soils are received for treatment				

Schedule 4 - Reporting

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

Table S4.1 Reporting requirements

Parameter	Reporting period *	Period ends
Leachate and/ or groundwater level As specified by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December
Point source emission to air As specified by schedule 3, table 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
<ul style="list-style-type: none"> • Trace gas monitoring 	Every 12 months	31 December
Other leachate monitoring As specified by schedule 3, table S3.11	Every 12 months	31 December
<ul style="list-style-type: none"> • Hazardous substances 	Every 12 months	31 December
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
Process monitoring requirements as specified by Schedule 3 table S3.13	Every 3 months	31 March, 30 June, 30 September, 31 December
Other Monitoring requirements – contaminated soil as specified by Schedule 3 table S3.14	Every 3 months	31 March, 30 June, 30 September, 31 December

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

Table S4.2: Annual production/treatment

Leachate: 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.	Cubic metres/year
Landfill gas: combustion in flares; combustion in gas engines; Other methods of gas utilisation.	Normalised cubic metres/year
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)	m ³ /hr
Soil Repair Centre: Bioremediation treatment Hazardous waste IN Hazardous waste OUT Non hazardous waste IN Non hazardous waste OUT Waste recycled Waste disposed	tonnes

Table S4.3 Performance Parameters

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

Table S4.4 Reporting Forms

Media/parameter	Reporting Format	Date of Form
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Sewer	Form Sewer 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14

Table S4.4 Reporting Forms

Media/parameter	Reporting Format	Date of Form
Particulate matter	Form Particulate 1 or other reporting format to be agreed in writing with the Environment Agency	28/08/14
Waste Return	Waste Return Form RATS2E	28/08/14
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	28/08/14
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	28/08/14
Processing monitoring	Reporting format to be agreed in writing with the Agency	28/08/14

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	EPR/BJ9339IF
Name of operator	Biffa Waste Services Limited
Location of Installation	Skelton Grange Landfill Site Pontefract Lane Newsam Green Leeds West Yorkshire LS15 9AD
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and Time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

Part B to be 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 installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of *Biffa Waste Services Limited*

Schedule 6 - Interpretation

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

“*annually*” means once every year.

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

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

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

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

“*Cell layout drawing*” means:

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

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

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

- The results of all testing required by the CQA programme - this must include the records of any

failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;

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

“*disposal*”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

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

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

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

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

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

“*hazardous property*” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

“*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.

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

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

“*Landfill Infrastructure*” means any specified element of the:

- permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);

- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;
- lining within the installation.

within the site.

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

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

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

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

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

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

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

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

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

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

for the New Cell.

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

“Pests” means Birds, Vermin and Insects.

“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.

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“STF” means Soil Treatment Facility

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

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

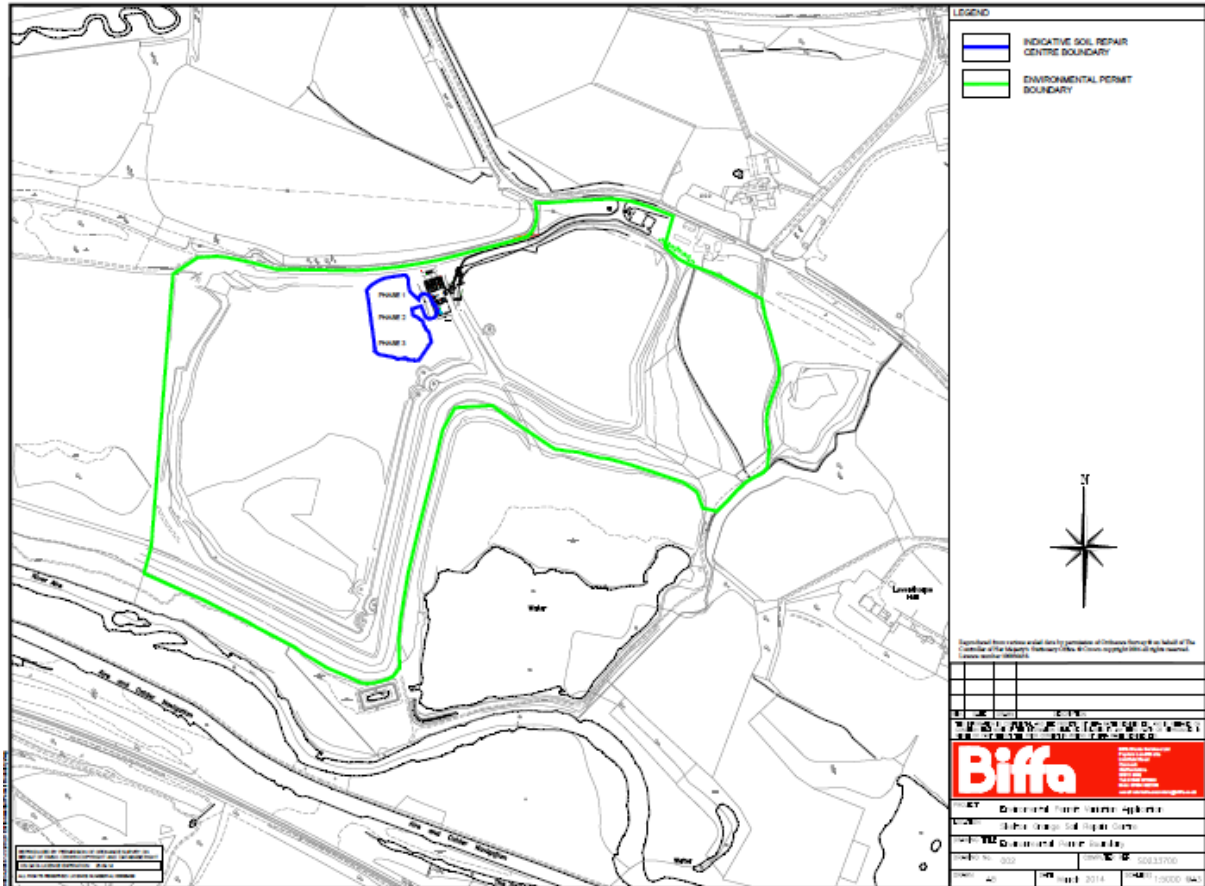
“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

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

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

“year” means calendar year ending 31 December.

Schedule 7 - Site plan



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END OF PERMIT

Permit Number:
Facility:

EPR/BJ9339IF
Skelton Grange Landfill Site

Operator:
Form Number:

Biffa Waste Services Limited
Leachate 1 / DD/MM/YY

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]

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

Signed Date.....
(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility:

Skelton Grange Landfill Site

Form Number:

Air1 / DD/MM/YY

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]

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

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

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

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

Signed

Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility:

Skelton Grange Landfill Site

Form Number:

Water1 / DD/MM/YY

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.

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

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

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

Signed Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility:

Skelton Grange Landfill Site

Form Number:

Sewer1 / DD/MM/YY

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]

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

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

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

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

Signed

Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility: Skelton Grange Landfill Site **Form Number:** LFG1 / DD/MM/YY
Permit Number: AB1234CD **Operator:** [Operator name]
Facility: [Facility name] **Form Number:** / DD/MM/YY

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]

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

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

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

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

Signed Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility:

Skelton Grange Landfill Site

Form Number:

Particulate1 / DD/MM/YY

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]

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

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

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

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

Signed

Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Permit Number:

EPR/BJ9339IF

Operator:

Biffa Waste Services Limited

Facility:

Skelton Grange Landfill Site

Form Number:

Energy1 / DD/MM/YY

Reporting of Energy Usage for the year 2006

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Biffa Waste Services Limited)

Drafting note: if the operator is required to submit Resource Efficiency Physical Index (REPI) data to the Pollution Inventory, please ensure that no metrics are repeated in this reporting form.

