Variation notice with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Trecatti Landfill Site

Biffa Waste Services Limited
Fochriw Road
Merthyr Tydfil
Mid Glamorgan
CF48 4AB

Variation notice number
EPR/RP3733PC/V004

Permit number
EPR/RP3733PC

Trecatti Landfill Site
Permit number EPR/RP3733PC

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations 2010 S.I.2010 No. 675 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

The varied conditions do not authorise any new activities at the Installation, rather they are a revision to the original conditions, using conditions consistent with the Environment Agency's latest template permit for landfill sites. Improved regulation in relation to environmental monitoring arrangements has been effected through imposition of the revised conditions. Additional improvement conditions have been imposed to regularise groundwater, leachate, and landfill gas monitoring arrangements and compliance limits, where not adequately covered by previous permit conditions.

The Operator appealed the conditions imposed when the Permit was originally issued. The new conditions introduced by this Variation are designed to resolve the issues raised by the Operator in their appeal. One major site-specific issue raised in the appeal related to leachate management, in particular the leachate level limits imposed, and requirement to reduce leachate levels. The new conditions remove the requirement to reduce leachate levels to 5 metres above base across the whole of the site, and firstly require the Operator to work towards achieving compliance with the leachate level limits originally proposed in the Application, and secondly to revisit their supporting risk assessment exercises in greater detail with the aim of establishing leachate level compliance limits with the agreement of both the Operator and Regulator.

Variation notice DP3037UY (reference EPR/RP3733PC/V003) removed the conditions permitting the disposal of stable non-reactive hazardous wastes, gypsum, and asbestos wastes and the provision for a new separate cell. The site however has prior to the issue of the original permit accepted asbestos waste and condition 4.1.1 has been amended to ensure the operator retains a record of the location of these wastes.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

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

Status Log of the permit		
Detail	**Date**	**Response Date**
Application EPR/RP3733PC (reference EPR/RP3733PC/A001)	Received 07/05/04	Duly made 21/05/04
Permit EPR/RP3733PC determined	09/03/05	

Status Log of the permit		
Detail	**Date**	**Response Date**
Application for Permit Variation YP3037UA (reference EPR/RP3733PC/V002)	Received 28/09/07	Duly made 09/10/07
Application for Permit Variation DP3037UY (reference EPR/RP3733PC/V003)	Received 17/12/07	Duly made 02/01/08
Variation notice DP3037UY (reference EPR/RP3733PC/V003) determined	18/01/08	
Variation notice YP3037UA (reference EPR/RP3733PC/V002) determined	14/04/08	
EA-initiated Variation EPR/RP3733PC/V004 determined	18/01/11	

Other existing licences/authorisations/registrations relating to this site		
Holder	**Reference Number**	**Date of issue**
Biffa Waste Services Limited	Trade effluent discharge consent (to sewer) reference number TE456	14/04/93

End of Introductory Note.

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2010

Permit

Permit number

EPR/RP3733PC

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) varies the permit as set out below.

Biffa Waste Services Limited ("the Operator"),

whose registered office is

Coronation Road
Cressex
High Wycombe
Buckinghamshire
HP12 3TZ

company registration number 946107

holds a permit to operate a *regulated facility* at

Trecatti Landfill Site
Fochriw Road
Merthyr Tydfil
Mid Glamorgan
CF48 4AB

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 18/01/11

Name	Date
	18th January 2011

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

All conditions and schedules to permit EPR/RP3733PC and variations YP3037UA (reference EPR/RP3733PC/V002) and DP3037UY (reference EPR/RP3733PC/V003) are deleted.

Schedule 2 – conditions to be amended

None.

Schedule 3 – conditions to be added

The following conditions and schedules are added to the permit.

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 09/03/2005 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 For the following activities referenced in schedule 1, table S1.1 (A2, A3, A4, A5 and A6) the Operator shall:

(a) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(b) Implement any appropriate measures identified by a review.

1.4 Efficient use of raw materials

1.4.1 For the following activities referenced in schedule 1, table S1.1 (A2, A3, A4, A5, A6, A7, A8 and A9) 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 For the following activities referenced in schedule 1, table S1.1 (A2, A3, A4, A5, A6, A7, A8 and A9) the Operator shall:

(a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;

(b) review and record at least every four years whether changes to those measures should be made; and

(c) take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

2.1.1 The Operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

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

2.3 Operating techniques

2.3.1 (a) For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3, A4, A5, A6, A7, A8 and A9) the activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

(b) If notified by the Environment Agency that the activities are giving rise to pollution, the Operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.2 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3, A4, A5 and A6) the any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.3 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3, A4, A5, A6, A7, A8 and A9) 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.

2.3.4 The Operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

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

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the Operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

There are no pre-operational conditions in this permit.

2.6 Landfill Engineering

2.6.1 No construction of any new cell of the landfill shall commence until the Operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

2.6.2 For the following activities referenced in schedule 1, table S1.1 (A1) 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) 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) 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(s) S2.2, S2.3; 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 (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;

(c) waste at the point of dispatch

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

2.7.3 For the following activities referenced in schedule 1, table S1.1 (A1) *w*here the Operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.

2.7.4 For the following activities referenced in schedule 1, table S1.1 (A1) the Operator on accepting each delivery of waste shall provide a receipt to the person delivering it.

2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ESID6 dated 05/05/2004 revision 0.

2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.

2.7.7 For the following activities referenced in schedule 1, table S1.1 (A1) the Operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the Operator as commercially confidential shall be clearly identified in the record.

2.8 Leachate levels

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

2.9 Closure and aftercare

2.9.1 For the following activities referenced in schedule 1, table S1.1 (A2, A3, A4, A5, A6, A7, A8 and A9) the Operator shall maintain a closure and aftercare management plan.

2.10 Landfill gas management

2.10.1 The Operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:

(a) collect landfill gas; and

(b) control the migration of landfill gas.

2.10.2 The Operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the Operator shall flare the gas.

2.10.3 The Operator shall:

(b) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a revised landfill gas management plan;

(b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.11 Pests

2.11.1 The activities shall not give rise to pollution or hazards from pests. 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.

2.11.2 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;

(b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.2, S3.3 and S3.4.

3.1.2 For the following activities referenced in schedule 1, table S1.1 (A3 and A4) the limits given in schedule 3 shall not be exceeded, save that 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.

3.1.3 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3, A4, A5, A6, A7, A8 and A9) there shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.

3.1.4 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3, A4, A5, A6, A7, A8 and A9) there shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.

3.1.5 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.5 shall not be exceeded.

3.1.6 For the following activities referenced in schedule 1, table S1.1 (A1) the Operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:

(a) between nine and six months prior to the sixth anniversary of the granting of the permit, and

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

3.1.7 The limits for landfill gas arising from the installation set out in schedule 3, tables S3.6 and S3.7 shall not be exceeded.

3.1.8 The limits for particulate matter arising from the installation set out in schedule 3, table S3.12 shall not be exceeded.

3.2 Emissions of substances not controlled by emission limits

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

3.2.2 The Operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;

(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;

(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;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The Operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:

(a) Leachate specified in tables S3.1 and S3.9;

(b) Point source emissions specified in tables S3.2, S3.3 and S3.4;

(c) Groundwater specified in tables S3.5 and S3.11;

(d) Landfill gas specified in tables S3.6, S3.7 and S3.8;

(e) Surface water specified in table S3.10; and

(f) Particulate matter specified in table S3.12.

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) 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

(c) 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.

4 Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) the results of groundwater monitoring;

(ii) sub-surface landfill gas monitoring;

(iii) leachate levels, quality and quantities;

(iv) landfill gas generation and collection;

(v) waste types and quantities;

(vi) the location of hazardous waste deposits; and

(vii) the specification and as built drawings of the basal, sidewall and capping engineering systems.

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

4.2 Reporting

4.2.1 The Operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

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

(a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;

(b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3;

(c) the annual production/treatment set out in schedule 4 table S4.2;

(d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;

(e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;

(f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;

(g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;

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

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 Within one month of the end of each quarter, the Operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.2.5 The Operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 The Environment Agency shall be notified without delay following the detection of:

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

(b) the breach of a limit specified in the permit; or

(c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the Operator is to undertake monitoring and/or spot sampling, the Operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The Operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 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.

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

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

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

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

Schedule 1 - Operations

Table S1.1 Activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
A1	Section 5.2 Part A(1) (a), The disposal of waste in a landfill.	Landfill for non-hazardous waste (D5 –Specially engineered landfill).	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.
A2	Section 5.3, Part A(1)(c)(i), Biological treatment.	Storage and treatment of leachate in a facility with a capacity of >50 Tonnes/ day (D8 – Biological treatment of waste).	Leachate arising from the landfill.
A3	Section 1.1, Part A(1)(b)(iii), Burning of waste as a fuel.	Utilisation of landfill gas for energy recovery in an appliance with a rated thermal input of ≥ 3 MW, but < 50 MW (R9 – Use principally as a fuel to generate energy).	Landfill gas arising from the landfill.
	Directly Associated Activity		
A4	Landfill gas flaring	Flaring of landfill gas for disposal in an appliance.	Landfill gas arising from the landfill.
A5	Effluent discharge to sewer.	Discharge of treated leachate to sewer.	Leachate arising from the landfill.
A6	Water discharges to controlled waters.	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.
A7	Fuel storage.	Storage of fuel for operation of plant and equipment.	From storage of fuel to use in the operation of plant and equipment.
A8	Storage of other raw materials including lubricating oils and antifreeze.	Storage in bulk storage tanks.	From receipt of raw materials to their use within the installation.
A9	Production and storage of waste oils.	Production of waste oil during the operation of the listed activity and subsequent storage.	From the production of the waste to storage at the installation prior to removal by a third party.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to questions, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application;	07/05/04
	The response to questions raised to the Schedule 4 Further Information Notice dated 21st July 2004;	01/09/04
	The email from Biffa Waste Services Limited confirming that the Application should include the European Waste Code 16 01 03 as a permitted waste type;	08/03/05
	With the following exclusions: • Response to question B2.1.1 • Response to question B2.1.5; and • Response to question B2.2.36 insofar as it applies to monitoring of the surface water discharge; and • Response to question B2.2.65 insofar as particulate monitoring is not carried out in accordance with Agency guidance 'M17 - Monitoring of particulate matter in ambient air around waste facilities'; and • Response to question B2.2.31 insofar as it applies to the leachate head control and trigger levels; and • The proposed methane trigger level for landfill gas boreholes 1-3 as detailed in Table LFGRA21 of the Landfill Gas Risk Assessment; and • Response to question B3.1.10 insofar as the proposed CO emission level for the future landfill gas flares (Haase HTN) as detailed in Table LFGRA23 of the Landfill Gas Risk Assessment; and • Table 2.10.1 of the generic part B form insofar as it applies to the daily frequency for the monitoring of suspended solids; and • The paragraph titled *Perimeter Borehole Location and Spacing* of section 3.3.2 of the Landfill Gas Risk assessment submitted as part of the Application; and • Section 3.3.3 of the Landfill Gas Risk Assessment submitted as part of the Application; and • Drawing ESID 4a, entitled 'Site Layout and Waste Deposition' and dated 04/05/04 insofar as it has been superseded by Drawing ESID 4a Rev. 1, entitled 'Site Layout and Waste Deposition' dated 27/08/04; and • Drawing ESID7b, entitled 'Leachate Management Construction Details' and dated insofar as it has been superseded by Drawing ESID7b Rev. 1 dated 04/05/04.	
Provision of information	Particulate monitoring information	17/06/05
Provision of information	Report in response to improvement condition 15a, dated 8th Sept 05, on the trace gases found in BH5.	-
Variation application – Remove SNRHW and asbestos wastes Ref. DP3037UY	All parts, removing provision to construct a separate cell(s) for SNRHW and asbestos wastes, as detailed on Drawings ESID 4a Rev. 1, and Drawing ESID 4b.	17/12/07
Variation application – LFG Engines Ref. YP3037UA	The response to questions C2.1 and C2.2 and given in section 1.2, Table 1/1 and Appendix 2 of the Variation Supporting Statement reference 407-0034-00246-002/SS.	28/09/07

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Provision of information	Report 08514290139.500/B.0 on landfill gas management Trecatti landfill site dated March 2009	-
	Action plan for the investigation of the exceedance of groundwater trigger levels in borehole GW2.	21/05/10

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
1	The Operator shall review all available groundwater monitoring data relating to both the existing groundwater monitoring points, and those recently installed boreholes 81701091 (GW9), 81701101 (GW10), 81701111 (GW11), 81701121 (GW12) and submit to the Environment Agency for approval proposed control and trigger levels for key determinands based on a minimum of at least 12 months monitoring data, including ammoniacal nitrogen and chloride, for groundwater quality for individual downgradient monitoring locations. Derivation of compliance limits and assessment criteria shall be undertaken in accordance with Environment Agency publication H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010 and good statistical practice and shall include assessment for and removal of outliers in the data sets and the use of graphical time / concentration charts. On approval in writing by the Environment Agency, the compliance limits and assessment criteria for groundwater quality shall be implemented.	18 /07/12
2a	The Operator shall provide to the Agency for approval a landfill gas management and monitoring plan having regard to "Guidance on the management of landfill gas' (LFTGN03)". The plan shall include but not be limited to a review of their landfill gas risk assessment and data from the landfill gas collection system. Based on this review the Operator shall assess whether fluctuations in the flow or composition of landfill gas in the collection system presents a risk to controlling emissions to air or other environmental impact.	18/07/11
2b	If under reference 2a above it is concluded that fluctuations in the flow or composition of landfill gas in the collection system present a risk to controlling emissions to air or other environmental impact then the following requirement shall apply: The Operator shall provide written proposals for the installation of appropriate measures for continuous monitoring of the composition and flow rate of landfill gas at the input to the gas engine(s) and/ or flare(s) for approval by the Agency. The proposals shall ensure that any monitoring is possible at all times, and appropriate back-up systems are in place to control landfill gas.	18/10/11
3	The Operator shall undertake an assessment of the environmental significance of the authorised discharge of treated leachate (effluent) from the landfill to sewer, and shall propose revised compliance limits for effluent quality for effluent discharged to sewer from the landfill, where necessary. The assessment shall, unless otherwise agreed in writing with the Environment Agency, follow the methodology set out in Environment Agency document Horizontal Guidance Note H1 – Environmental risk assessment for permits. The Operator shall submit to the Environment Agency for approval, details of the assessment, and proposed revised compliance limits for effluent quality, in the form of a written report.	18/04/11

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
4	The Operator shall provide to the Agency for approval a leachate management and monitoring plan having regard to H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010. The plan shall include but not be limited to the implementation of measures to reduce leachate heads within the landfill to levels lower than the limits proposed in the original Application, as follows: Phase 1 – leachate head limit 5 metres above base; and Phase 2 – leachate head limit 33 metres above base. The plan shall include an addendum detailing: • Details of the measures taken to achieve the necessary reduction in leachate levels; and • A staged timetable for achieving as soon as possible the necessary reduction in leachate levels.	18/04/11
5	The Operator shall submit in writing to the Environment Agency for approval :- 1. A revised hydrogeological risk assessment that forms a baseline status for the landfill that describes and explains the existing observed effects of the landfill to date on groundwater beneath the landfill. All components of the revised baseline HRA shall be described and explained including the conceptual model, quantitative model, quantitative model parameterisation, quantitative model results, monitoring results for each landfill cell and groundwater, and correlation of the modelling results and the observed groundwater conditions. 2. Once the revised baseline HRA is approved by the Agency the Operator shall use the baseline HRA to derive suitable leachate compliance limits and assessment criteria for each cell, and revise the requisite surveillance programme. The revised hydrogeological risk assessments shall be prepared in accordance with relevant guidance contained within Environment Agency publication H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010."	18/07/11
6	The Operator shall submit in writing to the Environment Agency for approval a revised gas risk assessment. The assessment shall include (but not be limited to): • Review and justification of the effects of leachate abstraction, the propensity of gases to go into and out of solution with depth, zones of influence (both vertical and horizontal) of leachate and landfill gas extraction wells, synergistic effects and auto-ignition temperatures; • Review of the ability and effectiveness of all existing measures to contain, collect, control and prevent the migration of landfill gas throughout the entire depth of the waste mass(es) and their potential to contribute towards adverse odour impacts at sensitive receptors beyond the installation boundary; and The revised gas risk assessment shall be prepared in accordance with the recommendations given within the relevant Environment Agency Landfill Technical Guidance Notes (LFTGN 03 to 08).	6 Months from date of compliance with reference 5.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
7	Following reviews of the hydrogeological, and gas, risk assessments undertaken as a result of Refs. 5 and 6, the Operator shall submit to the Environment Agency for approval written proposed revised leachate level assessment criteria and compliance limits demonstrated to minimise emissions to groundwater, to prevent the input of hazardous substances to groundwater, to limit the inputs of non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater, and to enable effective landfill gas management to take place. Where the proposed revised leachate level compliance limits show that a further reduction in leachate levels within the landfill are required to prevent the input of hazardous substances to groundwater, to limit the inputs of non-hazardous pollutants to groundwater, the Operator shall submit in writing to the Environment Agency for approval a revised leachate management plan. The revised leachate management plan shall include (but need not be limited to) assessment of: • Appraisal and selection of options and proposals for achieving the necessary reduction in leachate levels; • A timetable for achieving that reduction in leachate levels as soon as possible; • Appropriate monitoring techniques for monitoring leachate levels within the waste, including provision of monitoring points discrete from extraction wells; • Capacity of existing extraction infrastructure; • Well depth; • Well yield; • Provision of additional extraction infrastructure; • Methods for minimising ingress of water into the waste body; • Maintenance and replacement of extraction infrastructure during both operational and closure periods; • Capacity of treatment infrastructure, and provision of additional capacity where necessary; • Capacity of treated effluent disposal infrastructure, and provision of additional capacity where necessary, including by alternative means and application of best available techniques; • Contingency measures to be undertaken if assessment criteria for leachate level exceeded. The revised leachate management plan shall be prepared in accordance with relevant guidance contained with Environment Agency guidance publications “How to comply with your environmental permit Additional guidance for: Landfill (EPR 5.02)”, and “Guidance for the Treatment of Landfill Leachate (IPPC S5.03)”. On approval in writing by the Environment Agency, the timetable for achieving reduction in leachate levels proposed in 8a above shall be implemented by the Operator.	31/07/11

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
8	The Operator shall provide to the Agency a report for approval containing the results of a review of the perimeter borehole trace gas monitoring data which identifies the source of gases in monitoring points 81701016, 81701021, 81701025, 81701026 and shall propose where appropriate assessment criteria and compliance limits for appropriate parameters in those monitoring points to identify the escape of landfill gas from the landfill. On approval in writing by the Environment Agency assessment criteria and compliance limits for methane and carbon dioxide shall be implemented by the Operator.	18/07/11
9	The Operator shall provide to the Agency for approval management plans having regard to the appropriate guidance which details measures for the control of Litter, Odour; and Pests.	18/04/11

Table S1.4 Annual waste input limits	
Category	**Limit Tonnes/ Year**
Non-hazardous waste	625,000
Inert waste including inert waste imported for restoration	625,000
Total waste deposits	625,000

Schedule 2 - List of permitted wastes

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Lubricants (oil and greases)	-

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
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 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	sludges from washing and cleaning
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 09	lime mud waste
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 01	**wastes from the leather and fur industry**
04 01 01	fleshings and lime split wastes
04 01 02	liming waste
04 01 06	sludges, in particular from on-site effluent treatment containing chromium
04 01 07	sludges, in particular from on-site effluent treatment free of chromium

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 02	**wastes from the textile industry**
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
05	**WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL**
05 01	**wastes from petroleum refining**
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 01 13	boiler feedwater sludges
05 01 14	wastes from cooling columns
05 01 16	sulphur-containing wastes from petroleum desulphurisation
05 01 17	bitumen
05 06	**wastes from the pyrolytic treatment of coal**
05 06 04	waste from cooling columns
05 07	**wastes from natural gas purification and transportation**
05 07 02	wastes containing sulphur
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 03	**wastes from the MFSU of salts ~~and their solutions~~ and metallic oxides**
06 03 14	solid salts ~~and solutions~~ other than those mentioned in 06 03 11 and 06 03 13
06 03 16	metallic oxides other than those mentioned in 06 03 15
06 05	**sludges from on-site effluent treatment**
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
06 09	**wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes**
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	**wastes from the manufacture of inorganic pigments and opacificiers**
06 11 01	calcium-based reaction wastes from titanium dioxide production
06 13	**wastes from inorganic chemical processes not otherwise specified**
06 13 03	carbon black
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 13	waste plastic
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 17	wastes containing silicones other than those mentioned in 07 02 16
07 03	**wastes from the MFSU of organic dyes and pigments (except 06 11)**
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
07 04	**wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 05	**wastes from the MFSU of pharmaceuticals**
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 14	solid wastes other than those mentioned in 07 05 13
07 06	**wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 07	**wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
08 01	**wastes from MFSU and removal of paint and varnish**
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
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)
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 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

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

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	**wastes from casting of ferrous pieces**
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 10	**wastes from casting of non-ferrous pieces**
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 14	waste binders other than those mentioned in 10 10 13
10 11	**wastes from manufacture of glass and glass products**
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
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 by non-hazardous landfill	
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
11	**WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY**
11 01	**wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)**
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 02	**wastes from non-ferrous hydrometallurgical processes**
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 05	**wastes from hot galvanising processes**
11 05 01	hard zinc
11 05 02	zinc ash
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
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

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 03	end-of-life tyres
16 01 12	brake pads other than those mentioned in 16 01 11
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
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
16 06	**batteries and accumulators**
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 08	**spent catalysts**
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 11	**waste linings and refractories**
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	**metals (including their alloys)**
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
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
18	**WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**
18 01	**wastes from natal care, diagnosis, treatment or prevention of disease in humans**
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection(for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 07	chemicals other than those mentioned in 18 01 06
18 02	**wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 06	chemicals other than those mentioned in 18 02 05
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 01	**wastes from incineration or pyrolysis of waste**
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 03	**stabilised/solidified wastes** [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

[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 by non-hazardous landfill	
Waste code	**Description**
19 04	**vitrified waste and wastes from vitrification**
19 04 01	vitrified waste
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 06	**wastes from anaerobic treatment of waste**
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	~~solutions and~~ sludges from regeneration of ion exchangers
19 10	**wastes from shredding of metal-containing wastes**
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
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
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
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

Table S2.2 Permitted waste types for disposal by non-hazardous landfill	
Waste code	**Description**
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
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 only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection.
20 02	**garden and park wastes (including cemetery waste)**
20 02 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 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	bulky waste

Table S2.3 Permitted waste types accepted for restoration	
Waste code	**Description**
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 05	de-inking sludges from paper recycling
03 03 09	lime mud waste

Table S2.3 Permitted waste types accepted for restoration	
Waste code	**Description**
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 05	**wastes from aerobic treatment of solid wastes**
19 05 03	off-specification compost
19 06	**wastes from anaerobic treatment of waste**
19 06 04	digestate from anaerobic treatment of municipal waste
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 05	sludges from treatment of urban waste water
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 02	sludges from water clarification
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 09	minerals (for example sand, stones)
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 02	**garden and park wastes (including cemetery waste)**
20 02 02	soil and stones

Schedule 3 – Emissions and monitoring

Table S3.1 Leachate level limits and monitoring requirements

Monitoring point reference/ Description (1)	Limit	Monitoring frequency	Monitoring method
81703050 (LW5) and 81703060 (LW6) (Monitoring points located in Phase 1)	5 metres above the base of Phase 1 (2)	Monthly	Unless otherwise agreed in writing with the Environment Agency, monitoring methods used shall be in accordance with Environment Agency document 'Guidance on monitoring of landfill leachate, groundwater and surface water' (LFTGN02).
81703010 (LW1), 81703020 (LW2), 81703030 (LW3) and 81703040 (LW4) (Monitoring points located in Phase 2)	33 metres above the base of Phase 2 (2)	Monthly	
Monitoring points located in 'Merthyr Waste' area (3).	(3)	(3)	

(1) identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.

(2) Limits apply after compliance with condition 2.4.1 table S1.3 reference 4.

(3) Determined in compliance with condition 2.4.1, Table S1.3, Reference 7, where the revised HRA deems these necessary.

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

Emission point Ref. & Location (1)	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
T1G1	Oxides of Nitrogen	Gas utilisation plant	650 mg/m^3	Hourly mean	Annually	As per M2 version 7 issued August 2010 'Monitoring of stack emissions to air'.
	CO		1500 mg/m^3			
	Total VOCs		1750 mg/m^3			
T1G2, T2G1, T2G2, T2G3 and T2G4	Oxides of Nitrogen	Gas utilisation plant	500 mg/m^3	Hourly mean	Annually	As per M2 version 7 issued August 2010 'Monitoring of stack emissions to air'.
	CO		1400 mg/m^3			
	Total VOCs		1000 mg/m^3			
A8, A9, A10 and A11	Oxides of Nitrogen	Landfill Gas Flares	150 mg/m^3	Hourly mean	Annually (2)	As per M2 version 7 issued August 2010 Monitoring of stack emissions to air'.
	CO		100 mg/m^3 (50 mg/m^3)(3)			
	Total VOCs		10 mg/m^3			

(1) Identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.

(2) Annual monitoring of flares is only required when flare operate in excess of 10% of the time, taken on an annual assessment period.

(3) 50 mg/m³ limit applies for flares commissioned after 31 December 2003.

Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point Ref. & Location	**Parameter**	**Source**	**Limit (including unit)**	**Reference Period**	**Monitoring Frequency**	**Monitoring Standard or Method**
81702001 and 81702002 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Site drainage and uncontaminated groundwater from beneath composite liner via balancing lagoon system.	Volume of pumped discharge	8985 cubic metres per day	-	Daily	As per LFTGN02 issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'.
		Rate of pumped discharge	150 litres per second	-	Continuous	
		Suspended solids	100 mg/l	Spot sample	Monthly	
		COD	120 mg/l			
		Ammoniacal nitrogen	5 mg/l			
		pH	Minimum 6 pH units Maximum 8 pH units			
		Oil and grease	None visible	Observation	Monthly	

Table S3.4 Point source emissions to sewer, effluent treatment plant or by tankering or other transfer off-site– emission limits and monitoring requirements						
Emission point Reference & Location	**Parameter**	**Source**	**Limit (including unit)**	**Reference Period**	**Monitoring Frequency**	**Monitoring Standard or Method**
81703400 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Determined in compliance with condition 2.4.1 table S1.3, reference 3.	Leachate treatment plant	Determined in compliance with condition 2.4.1 table S1.3, reference 3.	Spot Sample	Determined in compliance with condition 2.4.1 table S1.3, reference 3.	As per LFTGN02 issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'. H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010.

Table S3.5 Trigger levels for emissions into groundwater and monitoring requirements

Monitoring point reference (1)	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
81701110 (GW1) and 81701120 (GW2)	Ammoniacal Nitrogen	1.50 mg/l	Spot sample	Quarterly	As per LFTGN02 (issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'. H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010.
	Chloride	250 mg/l			
	Cadmium	0.10 μg/l			
	Mecoprop	0.04 μg/l			
	Toluene	4.00 μg/l			
	Xylene	3.00 μg/l			
	Naphthalene	1.00 μg/l			
81701091 (GW9), 81701101 (GW10), 81701111 (GW11) and 81701121 (GW12)	Determined in compliance with condition 2.4.1, Table S1.3, Reference 1	Determined in compliance with condition 2.4.1, Table S1.3, Reference 1			

(1) identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.

Table S3.6 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including unit)	Monitoring frequency	Monitoring standard or method
81701001, 81701002, 81701003, 81701006, 81701007, 81701009, 81701010, 81701011, 81701012, 81701013, 81701014, 81701015, 81701017, 81701018, 81701019, 81701020, 81701022, 81701023 and 81701024. identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane	1.0 %v/v	Monthly	As per LFTGN 03 issued September 2004 'Guidance on the management of landfill gas'.
	Carbon Dioxide	10.0 %v/v		
	Oxygen	No limit		
	Atmospheric pressure	No limit		
	Differential Pressure	No limit		
	Meteorological data	No limit		
81701004 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane	3.0 %v/v		
	Carbon Dioxide	10.0 %v/v		
	Oxygen	No limit		
	Atmospheric pressure	No limit		
	Differential Pressure	No limit		
	Meteorological data	No limit		

Table S3.6 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description	**Parameter**	**Limit (including unit)**	**Monitoring frequency**	**Monitoring standard or method**
81701008 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane	1.0 %v/v	Monthly	As per LFTGN 03 issued September 2004 'Guidance on the management of landfill gas'.
	Carbon Dioxide	12.0 %v/v		
	Oxygen	No limit		
	Atmospheric pressure	No limit		
	Differential Pressure	No limit		
	Meteorological data	No limit		
81701016, 81701021, 81701025 and 81701026 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane	(1)		
	Carbon Dioxide	(1)		
	Oxygen	No limit		
	Atmospheric pressure	No limit		
	Differential Pressure	No limit		
	Meteorological data	No limit		

(1) Determined in compliance with condition 2.4.1, Table S1.3, reference 8.

Table S3.7 Landfill gas from capped surfaces – limits and monitoring requirements				
Monitoring point Ref. /description	**Parameter**	**Limit (include. unit)**	**Monitoring frequency**	**Monitoring Standard or method**
Permanently capped zone	Average methane flux and total methane emission	Average zone emission rate of 0.001 mg/m2/second	Annually	As per LFTGN 07 issued September 2004 'Guidance on monitoring landfill gas surface emissions'
Temporarily capped zone	Average methane flux and total methane emission	Average zone emission rate of 0.1 mg/m2/second	Annually	As per LFTGN 07 issued September 2004 'Guidance on monitoring landfill gas surface emissions'

Table S3.8 Landfill gas – other monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
T1G1, T1G2, T2G1, T2G2, T2G3 and T2G4 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	NOx and CO	Quarterly	Portable combustion analyser, as agreed with the Agency.	
	Sulphur Dioxide	Annually	As per M2 version 7 issued August 2010 'Monitoring of stack emissions to air'.	
Gas collection system at well control valve and manifolds on gas system	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Differential pressure Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly	As per LFTGN03 issued September 2004 'Guidance on the management of landfill gas'.	Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken. Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertaken.
Manifolds 1, 2, 3, 3A, 4, 5 and 7.	Gas flow rate			
Input to LFG Utilisation Compound identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Trace gas analysis in accordance with LFTGN04.	Annually	As per LFTGN04 issued September 2004 'Guidance for Monitoring Trace Components in Landfill Gas'.	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling.
Flares- A8, A9, A10 and A11 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Temperature	Weekly while flare operational	As per M2 version 7 issued August 2010	

Table S3.8 Landfill gas – other monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Input to LFG Utilisation Compound identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane Carbon Dioxide Oxygen Gas flow rate % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly	As per LFTGN05 issued September 2004 'Guidance for monitoring enclosed landfill gas flares'.	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.
81701005 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Methane	Monthly	As per LFTGN 03 issued September 2004 'Guidance on the management of landfill gas'.	
	Carbon Dioxide			
	Oxygen			
	Atmospheric pressure			
	Differential Pressure			

Table S3.9 Leachate– other monitoring requirements

Emission point reference or source or description of point of measurement (1)	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
81703050 (LW5) and 81703060 (LW6). (Monitoring points located in Phase 1) 81703010 (LW1), 81703020 (LW2), 81703030 (LW3) and 81703040 (LW4). (Monitoring points located in Phase 2) Monitoring points located in 'Merthyr Waste' area determined in compliance with condition 2.4.1, Table S1.3, Reference 7, where the revised HRA deems these necessary.	Electrical conductivity, Chloride, Ammoniacal Nitrogen, pH ,Total alkalinity, Magnesium, Potassium, Total sulphates, Calcium, Sodium, BOD, COD, TOC, TON, Manganese, Iron, Chromium, Copper, Lead, Zinc, Nickel, Mecoprop, Toluene, Xylene, Naphthalene and Cadmium	Quarterly	As per LFTGN02 issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'. H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010.	-
	Hazardous substances	Annually		-
	Depth to base of monitoring well	Annually		-

(1) identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.

Table S3.10 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
81702001, 81702002 and 81702003 identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Electrical conductivity, Chloride, Ammoniacal nitrogen, pH, Suspended solids, COD and BOD.	Monthly	As per LFTGN02 issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'.	

Table S3.11 Groundwater – other monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
81701110 (GW1), 81701120 (GW2), 81701130 (GW3), 81701140 (GW4), 81701150 (GW5), 81701160 (GW6), 81701170 (GW7), 81701180 (GW8) 81701091 (GW9), 81701101 (GW10), 81701111 (GW11) and 81701121 (GW12) identified on monitoring infrastructure plan T3180501, revision 1, dated 09/12/10.	Water level	Monthly	As per LFTGN02 issued February 2003 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'. H1 - Technical Annex to Annex (j): Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control Levels and Compliance Limits, v2.0, April 2010.	
	Electrical conductivity, Chloride, Ammoniacal nitrogen, pH, Total alkalinity, Magnesium, Potassium, Total sulphates, Calcium, Sodium, Nitrates, Nitrites, Phosphates, Manganese, Iron, Chromium, Copper, Lead, Zinc, Nickel, Mecoprop, Toluene, Xylene, Naphthalene and Cadmium.	Quarterly		
	Hazardous substances	Annually		
	Depth to base of monitoring well	Annually		

Table S3.12 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
D1, D2, D3 and D4 identified on monitoring infrastructure T3180501, revision 1, dated 09/12/10.	PM10	40μ/m3 - annual mean. 50μ/m3 - 24 hour mean, not to be exceeded >35 times per year.	24 hours	Six monthly	As per M17 issued March 2004 'Monitoring of Particulate Matter in ambient air around waste facilities'.
	Deposited particulate	200 mg/m-2 day-1	24 hours	Six monthly	

Schedule 4 - Reporting

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

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Leachate levels As required by condition 3.5.1	81703010 (LW1), 81703020 (LW2), 81703030 (LW3), 81703040 (LW4), 81703050 (LW5), 81703060 (LW6) and	Every 3 months	1 January, 1 April, 1 July, 1 October
	monitoring points located in 'Merthyr Waste' area determined in compliance with condition 2.4.1, Table S1.3, Reference 7, where the revised HRA deems these necessary.		From date of installation and then 1 January, 1 April, 1 July, 1 October.
Emissions to air Parameters as required by condition 3.5.1	T1G1, T1G2, T2G1, T2G2, T2G3, T2G4, A8, A9, A10 and A11.	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.5.1	81702001 and 81702002	Every 3 months	1 January, 1 April, 1 July, 1 October
Emissions to sewer, effluent treatment plant, etc. Parameters as required by condition 3.5.1	81703400	Every 3 months	1 January, 1 April, 1 July, 1 October
Groundwater Parameters as required by condition 3.5.1	81701110 (GW1), and 81701120 (GW2).	Every 3 Months	1 January, 1 April, 1 July, 1 October
	81701091 (GW9), 81701101 (GW10), 81701111 (GW11) and 81701121 (GW12).		From date of installation and then 1 January, 1 April, 1 July, 1 October.
Landfill gas lateral migration Parameters as required by condition 3.5.1	81701001, 81701002, 81701003, 81701004, 81701006, 81701007, 81701008, 81701009, 81701010, 81701011, 81701012, 81701013, 81701014, 81701015, 81701016, 81701017, 81701018, 81701019, 81701020, 81701021, 81701022, 81701023, 81701024, 81701025 and 81701026.	Every 3 months	1 January, 1 April, 1 July, 1 October
Landfill gas surface emissions Parameters as required by condition 3.5.1	Permanently and Temporarily capped zone	Every 12 months	1 January

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Other Landfill gas monitoring Parameters as required by condition 3.5.1 Trace gases	81701005	Every 3 months	1 January, 1 April, 1 July, 1 October
	Input to LFG Utilisation Compound	Every 12 months	1 January, 1 April, 1 July, 1 October
Other leachate monitoring Parameters as required by condition 3.5.1	81703010 (LW1), 81703020 (LW2), 81703030 (LW3), 81703040 (LW4), 81703050 (LW5) and 81703060 (LW6)	Monthly and quarterly parameters every 3 months	1 January, 1 April, 1 July, 1 October
Hazardous substances, and Monitoring point base		Every 12 months	1 January
	Monitoring points located in 'Merthyr Waste' area determined in compliance with condition 2.4.1, Table S1.3, Reference 7, where the revised HRA deems these necessary.	Monthly and quarterly parameters every 3 months	From date of installation and then 1 January, 1 April, 1 July, 1 October.
Hazardous substances, and Monitoring point base		Every 12 months	1 January
Other surface water monitoring Parameters as required by condition 3.5.1	81702001, 81702002 and 81702003.	Every 3 months	1 January, 1 April, 1 July, 1 October
Particulate matter Parameters as required by condition 3.5.1	D1, D2, D3 and D4	Every 6 months	1 January, 1 April, 1 July, 1 October
Other groundwater monitoring Parameters as required by condition 3.5.1	81701110 (GW1), 81701120 (GW2), 81701130 (GW3), 81701140 (GW4), 81701150 (GW5), 81701160 (GW6), 81701170 (GW7), and 81701180 (GW8).	Monthly and quarterly parameters every 3 months	1 January, 1 April, 1 July, 1 October
Hazardous substances, and Monitoring point base		Every 12 months	1 January
	81701091 (GW9), 81701101 (GW10), 81701111 (GW11) and 81701121 (GW12).	Monthly and quarterly parameters every 3 months	From date of installation and then : 1 January, 1 April, 1 July, 1 October.
Hazardous substances, and Monitoring point base		Every 12 months	1 January

Table S4.2: Annual production/treatment	
Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant; Recirculated into the waste mass.	Cubic metres/year
Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year
Landfill gas: combustion in flares; combustion in gas engines; Other methods of gas utilisation.	Normalised cubic metres/year

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

Table S4.4 Reporting Forms		
Media/parameter	**Reporting Format**	**Date of Form**
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Air	Form Air 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Sewer	Form Sewer 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Particulate matter	Form Particulate 1 or other reporting format to be agreed in writing with the Environment Agency	18/01/11
Waste Return	Waste Return Form RATS2E	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	

Schedule 5 - Notification

This page outlines the information that the Operator must provide.

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

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

Part A

Permit Number	EPR/PR3733PC
Name of Operator	Biffa Waste Services Limited
Location of Facility	Trecatti Landfill Site Fochriw Road Merthyr Tydfil Mid Glamorgan CF48 4AB
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and Time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) 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 facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the Operator.

Schedule 6 - Interpretation

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

"Annually" means once every year.

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

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

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

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

"Cell layout drawing" means:

(a) A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:

  i. the location of the new cell on the site;

  ii. the proposed level (Above Ordnance Datum) of the base of the excavation;

  iii. the proposed finished levels of all containment and leachate drainage layers;

  iv. the positions of leachate management infrastructure; and

  v. the positions of landfill gas infrastructure (if appropriate).

(b) A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:

  i. changes to slope length and gradient within the cell;

  ii. new leachate or landfill gas infrastructure construction design;

  iii. slope stability issues such as new basal excavation level; and/or

  iv. depth of waste.

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

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

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

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

"Emissions to land" includes emissions to groundwater.

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

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

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

"Landfill Infrastructure" means any specified element of the:

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

within the site.

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

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

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

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

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

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

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

- groundwater under-drainage system;

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

for the New Cell.

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

"Pests" means Birds, Vermin and Insects.

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

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

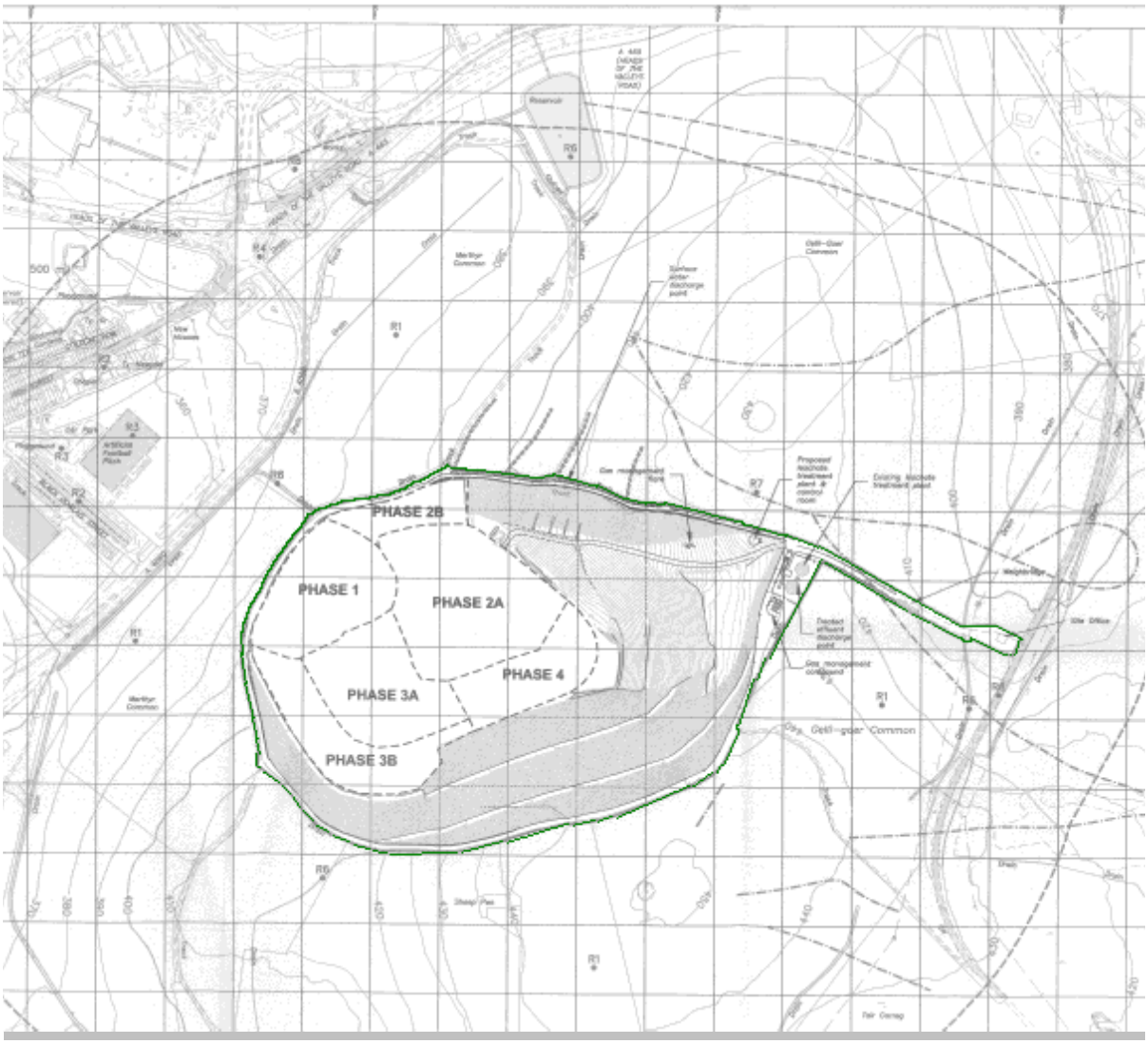
"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"Year" means calendar year ending 31 December.

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.

Schedule 7 - Site plan



END OF PERMIT

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Air1 / 18/01/11

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]
A1	Particulate Matter	20 mg/m^3	Continuous		BS EN 13284-1		
A1	Particulate Matter	20 mg/m^3	1 hour period		BS EN 13284-1		
A1	VOC as Total Organic Carbon (TOC)	20 mg/m^3	1 hour period		BS EN 12619		
A1	Hydrogen chloride	30 mg/m^3	1 hour period		BS EN 1911		
A1	Hydrogen fluoride	2 mg/m^3	1 hour period		ISO 15713		
A1	Carbon monoxide	100 mg/m^3	(average of ½-hour averages) over minimum 4 hour period		BS EN 15058		
A1	Sulphur dioxide	200 mg/m^3	(average of hourly averages) over minimum 4 hour period		BS EN 14791		
A1	Sulphur dioxide	150 mg/m^3	Continuous		BS EN 15267-3		
A2	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3	(average of ½-hour averages) over minimum 4 hour period		BS EN 14792		
A2	Cadmium & thallium and their	0.05 mg/m^3	over minimum 30 minute, maximum 8 hour period		BS EN 14385		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
	compounds (total)						
A2	Mercury and its compounds	0.05 mg/m^3	over minimum 30 minute, maximum 8 hour period		BS EN 13211		
A2	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/ m^3	over minimum 30 minute, maximum 8 hour period		BS EN 14385		

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

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

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

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

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Water1 / 18/01/11

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

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
W1	Total suspended solids	30 mg/l	For 95% of all measured values of periodic samples taken over one month		BS EN 872		
W1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l	24-hour flow proportional sample		BS EN 135006		
W1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l	24-hour flow proportional sample		BS 6068-2.89		
W1	pH	6-10	Continuous		BS6068-2.50		
W1	BOD	25 mg/l	Periodic		BS EN 1899-1 (1998)		

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

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

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

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

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Sewer1 / 18/01/11

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]
S1	Total suspended solids	30 mg/l	For 95% of all measured values of periodic samples taken over one month		BS EN 872		
S1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l	24-hour flow proportional sample		BS EN 135006		
S1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l	24-hour flow proportional sample		BS 6068-2.89		

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

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

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

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

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC
Facility: Trecatti landfill
Operator: Biffa Waste Services Limited
Form Number: WaterUsage1 / 18/01/11

Reporting of Water Usage for the year 2006

Water Source	Usage (m^3/year	Specific Usage (m^3/unit output)
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments :

Signed …….. Date……..

(authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Energy1 / 18/01/11

Reporting of Energy Usage for the year 2006

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

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Performance1 / 18/01/11

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	Units
Total raw material used	tonnes
mass release of oxides of sulphur per tonnes of product	Kg SO_2/tonnes of product
Zn releases to River Ouse per tonne of product	kg Zn/tonne of product
Cu releases to River Ouse per tonne of product	kg Cu/tonne of product

Operator's comments :

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Leachate 1 / 18/01/11

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]
L1	leachate head	X m above cell base					

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

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: Groundwater1 / 18/01/11

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

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
GW1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l			BS EN 135006		
GW1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l			BS 6068-2.89		
GW1	pH	6-10			BS6068-2.50		
GW1	BOD	25 mg/l			BS EN 1899-1 (1998)		

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

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC Operator: Biffa Waste Services Limited
Facility: Trecatti landfill Form Number: LFG1 / 18/01/11

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]
LFG1	methane	1 % v/v					
LFG 1	carbon dioxide	1.5 % v/v					
LFG 1	*oxygen*	-					

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

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/RP3733PC
Facility: Trecatti landfill
Operator: Biffa Waste Services Limited
Form Number: Particulate1 / 18/01/11

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]
A1	Particulate Matter	mg/m^3	Continuous		BS EN 15267-3		
A1	Particulate Matter	mg/m^3	1 hour period		BS EN 13284-1		

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

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)