



ENVIRONMENT
AGENCY

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Rhuddlan Bach Quarry Landfill Site

C & M Parry Plant Hire Limited
Rhuddlan Bach Quarry Landfill Site
Brynteg
Anglesey
LL78 7JJ

Permit number

WP3132SX

Rhuddlan Bach Quarry Landfill Site

Permit Number WP3132SX

Introductory note

This introductory note does not form a part of the permit

The main features of the installation are as follows.

Rhuddlan Bach Landfill Site is an inert landfill situated to the south of Brynteg, Anglesey, North Wales.

The installation is within 110m of Anglesey Fens SAC.

The landfill is in an operational limestone quarry. In addition to the quarrying and landfill activities there is also a materials recycling operation within the installation boundary. This operation is subject to a Local Air Pollution Prevention and Control (LAPPC) Permit issued by the Local Authority and a number of exemptions from the requirements of Waste Management Licensing registered by the Environment Agency. Both of these permissions will continue in force following the issue of this Permit. This Permit relates to the landfill operation only.

The site will be permitted to accept 75,000 tonnes of inert waste per year.

The landfill operation can be separated into wastes previously deposited under the waste management licence and future wastes to be deposited under the PPC Permit.

The wastes that have been previously deposited were placed directly onto the base of the quarry. The potential impacts from these wastes have been assessed in the application and permit conditions have been imposed where necessary.

Future deposits of waste will have to comply with the requirements of the Landfill Regulations 2002 (as amended). The main requirements that apply at this site are the stricter inert waste acceptance criteria and the establishment of a geological barrier (e.g. clay) between the waste and the limestone bedrock.

Landfill gas, groundwater and surface water monitoring requirements are included in permit conditions. Limits have been placed on any emissions where appropriate.

Status log of the permit

Detail	Date	Response Date
Application WP3132SX	Dated 9 th November 2006	
Response to Schedule 4 Notice	Request dated 6 th April 2006	Response dated 13 th July 2006
Request to extend determination	Request dated 24 th July 2006	Request accepted 1 st September 2006
Response to request for information	Request dated 16 th August 2006	Response dated 30 th August 2006
Permit determined	16 th March 2007	

Other PPC permits relating to this installation

Operator	Permit Number	Date of Issue
C & M Parry LAPPC Permit	IACC:26.03.93/3.5	30 th March 2004

Superseded or partially superseded licences/authorisations/consents relating to this installation			
Holder	Reference Number	Date of Issue	Fully or Partially Superseded
C & M Parry Plant Hire Limited	Waste Management Licence - EAWML/37203	21 st September 1999	Fully Superseded
C & M Parry Plant Hire Limited	Consent to Discharge to Controlled Waters - Cg038400101	9 th March 2000	Fully Superseded

End of Introductory Note

Permit

Pollution Prevention and Control (England and Wales) Regulations 2000
Landfill (England and Wales) Regulations 2002

Permit

Permit number

WP3132SX

The Environment Agency (the Agency) in exercise of its powers under regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) and Regulation 6 of the Landfill (England and Wales) Regulations 2002 (SI 2002 No.1559) hereby authorises **C & M Parry Plant Hire Limited** ("the Operator"),

whose Registered Office is

**Carreg Fawr
Treaddur Bay
Holyhead
Anglesey
LL65 2YL**

Company registration number 01808725

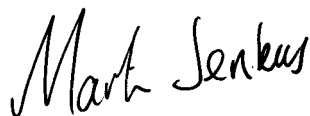
to operate an installation at

**Rhuddlan Bach Quarry Landfill Site
Brynteg
Anglesey
LL78 7JJ**

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

Signed

Date

	16 th March 2007
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Martin Jenkins

Authorised to sign on behalf of the Agency

Conditions

1. Management

1.1 General management

- 1.1.1 The Activities shall be managed and operated:
- (a) in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the operator as a result of complaints; and
 - (b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the Activities.
- 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.

1.2 Accidents that may cause pollution

- 1.2.1 The operator shall:
- (a) maintain and implement an accident management plan;
 - (b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;
 - (c) make any appropriate changes to the plan identified by a review.

1.3 Finance

- 1.3.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Agency dated 16th March 2007 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 Agency.
- 1.3.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover the cost of operating the landfill, as far as possible the cost of the financial provision required by condition 1.3.1 and the estimated costs for the closure and aftercare of the landfill.

1.4 Site security

- 1.5.1 Site security measures shall prevent unauthorised access to the site, as far as practicable.

2. Operations

2.1 Permitted activities

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

2.2 The site

- 2.2.1 The Activities shall not extend beyond the Site, being the land shown edged in red on the site plan at schedule 2 to this permit.

2.3 Operating techniques

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

2.4 Off-site conditions

There are no conditions in this permit to which Regulation 12(12) of the PPC Regulations apply.

2.5 Improvement programme

- 2.5.1 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 Agency.
- 2.5.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

2.6 Pre-operational conditions

There are no pre-operational conditions in this permit.

2.7 Engineering

- 2.7.1 No construction of any new cell shall commence until the operator has submitted construction proposals and the Agency has confirmed that it is satisfied with the construction proposals.
- 2.7.2 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 Agency.
- 2.7.3 No disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Agency has confirmed that it is satisfied with the CQA Validation Report.

- 2.7.4 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 Agency has confirmed that it is satisfied with the construction proposals.
- 2.7.5 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 Agency.
- 2.7.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant Landfill Infrastructure.
- 2.7.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.7.4 and 2.7.5 do not apply and the relevant Landfill Infrastructure may be constructed, provided that the construction proposals are submitted to the Agency as soon as practicable.
- 2.7.8 For the purposes of conditions 2.7.1, 2.7.3 and 2.7.4, the Agency shall be deemed to be satisfied where it has not, within the period of 4 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.

2.8 Waste acceptance

- 2.8.1 Wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 3, and
 - (b) they are inert waste, and
 - (c) from 30th October 2007 they are not liquid waste (including waste waters but excluding sludge), and
 - (d) all the relevant waste acceptance procedures set out in schedule 1 of the Landfill Regulations have been completed, and
 - (e) they fulfil the relevant waste acceptance criteria, and
 - (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
 - (g) from 30th October 2007 they are wastes which have been treated, except for wastes for which treatment is not technically feasible.
- 2.8.5 The operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
 - (b) waste at the point of deposit;
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.

- 2.8.6 Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.8.7 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.8.8 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ES1580.ESID.006(2528/04).
- 2.8.9 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.
- 2.8.10 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 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.

2.9 Closure, aftercare and decommissioning

- 2.9.1 The operator shall maintain and operate the Activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.

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 4 table S4.1.

3.2 Emissions to groundwater

- 3.2.1 There shall be no emission from the activities into groundwater of any substance in List I (as defined by the Groundwater Regulations) contrary to those Regulations.
- 3.2.2 There shall be no emission from the activities into groundwater of any substance in List II (as defined in the Groundwater Regulations) so as to cause pollution (as defined in those Regulations).
- 3.2.3 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 4 table S4.2 of shall not be exceeded.
- 3.2.4 The operator shall submit to the Agency a review of the Hydrogeological Risk Assessment:
 - (a) between 9 and 6 months prior to the fourth anniversary of the granting of the permit, and
 - (b) between 9 and 6 months prior to every subsequent 4 years after the fourth anniversary of the granting of the permit.

3.3 Fugitive emissions of substances

- 3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.3.2 Litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise, the litter and mud.
- 3.3.3 Litter or mud arising from the activities shall be cleared from affected areas outside the Site as soon as practicable.
- 3.3.4 All liquids, 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.
- 3.3.5 The limits for landfill gas arising from the installation set out in schedule 4, table S4.3, shall not be exceeded.

3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the Site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odour.

3.5 Noise and vibration

- 3.5.1 Emissions from the Activities shall be free from noise and vibration at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate to prevent or where that is not practicable to minimise the noise and vibration.

3.6 Monitoring

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring for the parameters, specified in the following tables in schedule 4 to this permit:
 - (a) Point source emissions specified in table S4.1;
 - (b) Groundwater specified in tables S4.2 and S4.6;
 - (c) Landfill gas specified in tables S4.3 and, S4.4;
 - (d) Surface water specified in table S4.5.

- 3.6.2 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.
- 3.6.3 A topographical survey of the site referenced to Ordnance Datum shall be carried out:
- (a) annually, and
 - (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
 - (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.

3.7 Transfers off-site

- 3.7.1 Records of all the wastes sent off site from the activities, for either disposal or recovery, shall be maintained.

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 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) waste types and quantities; and
 - (iv) the specification and as built drawings of the basal, sidewall and capping engineering systems.
- 4.1.2. Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.
- 4.1.3. All records required to be held by this permit shall be available for inspection by the Agency at any reasonable time.

4.2 Reporting

4.2.1 A report or reports on the performance of the activities over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the 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) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;
- (c) the annual production/treatment set out in schedule 5 table S5.2.
- (d) details of any contamination or decontamination of the site which has occurred;
- (e) the topographical surveys required by condition 3.6.3 other than those submitted as part of a CQA validation report;
- (f) 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;
- (g) an assessment of the settlement behavior 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;
- (h) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- (i) a summary of the WAC compliance testing undertaken in the period;

4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the 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 5 table S5.1;
- (b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.3; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.3 A summary report of the waste types and quantities accepted and removed from the site shall be made for each quarter. It shall be submitted to the Agency within one month of the end of the quarter and shall be in the format required by the Agency.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 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.

4.2.5 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency

4.3 Notifications

- 4.3.1 The Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit;
 - (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 6 to this permit within the time period specified in that schedule.
- 4.3.3. Prior written notification shall be given to the Agency of the following events and in the specified timescales:
- (a) as soon as practicable prior to the permanent cessation of any of the permitted activities;
 - (b) as soon as practicable prior to the cessation of the landfill disposal activities, for a period likely to exceed 1 month; and
 - (c) at least 7 days prior to the resumption of the landfill disposal activities after a cessation notified under (b) above.
- 4.3.4 Where the 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 Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.5 The Agency shall be notified within 7 days of any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence.
- 4.3.6 The Agency shall be provided, within 14 days of the operator or any relevant person being convicted of a relevant offence, (unless such information has already been notified to the Agency), with details of the nature of the offence, the place and date of conviction, and the sentence imposed.
- 4.3.7 The Agency shall be notified within 14 days of the operator and/or any relevant person lodging an appeal against a conviction for any relevant offence and of the outcome when the appeal is decided.
- 4.3.8 The Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- (a) any change in the operator's trading name, registered name or registered office address;
 - (b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
 - (c) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

Schedule 1 - Operations

Table S1.1 Activities

Activity listed in schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 5.2 Part A(1) (b), The disposal of waste in a landfill.	Landfill for inert waste (landfill classification under the Landfill Regulations 2002).	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in section 2.8, as an integral part of landfilling.
Directly Associated Activity		
Water discharges to controlled waters.	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.
Fuel storage.	Storage of fuel for operation of plant and equipment.	Fuel storage tank.

Table S1.2 Operating techniques

Description	Parts	Date
Application	The response to questions 2.1, 2.2, 2.3, 2.4, 2.5 and 2.11 of the Application excluding sections: B2.2.4, B2.2.5, B2.2.38, B2.2.42, B2.2.48, B2.2.54, B2.2.56 (in relation to monitoring only) and B2.5.1 (in relation to the first layer of waste only).	9 th November 2005
Schedule 4 Notice dated 6 th April 2006	All parts	Response dated 13 th July 2006
Letter Requesting Further Information dated 16 th August 2006	All parts	Response dated 30 th August 2006

Table S1.3 Improvement Programme Requirements

Reference	Requirement	Date
1	The Operator shall submit to the Agency for approval appropriately justified groundwater monitoring Control Limits for boreholes BH3, BH4 and BH5 for the quality determinands as set in Table S4.2. This shall be completed using existing data. The limits shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st May 2007
2	The Operator shall submit to the Agency for approval appropriately justified surface water monitoring Control Limits for location SW2 for the quality determinands as set in Table S4.1. The limits shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st May 2007

Table S1.3 Improvement Programme Requirements

Reference	Requirement	Date
3	The Operator shall confirm that the existing groundwater monitoring boreholes BH1 and BH5 shall not be decommissioned/ lost as a result of planning approval for the proposed extension area. If it is confirmed that boreholes BH1 and BH5 shall be decommissioned/ lost as a result of planning approval, the Operator shall submit proposals for replacement boreholes, to be installed immediately and included into the groundwater compliance / monitoring regime following Agency agreement. Replacement boreholes shall be designed and installed in accordance with the Environment Agency LFTGN02 document "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water". The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st May 2007
4	The Operator shall submit to the Agency for approval proposals for the installation of the additional monitoring borehole BH6 that is required under the Planning Permission (Ref. 23C160D/EIA dated 8th June 2006. These proposals shall include the location and installation details, and be designed and installed in accordance with the Environment Agency LFTGN02 document 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water'. This borehole shall also enable gas monitoring in accordance with the Environment Agency LFTGN03 document 'Guidance on management of Landfill Gas'. Upon installation and commissioning, this borehole shall be included in groundwater and gas monitoring plans. The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st July 2007
5	The Operator shall submit to the Agency for approval details for the installation of an engineered geological barrier onto the quarry base and sidewalls where waste filling is proposed, as outlined in point 12 of the response to the Schedule 4 Notice (dated 13/07/06). The engineered geological barrier shall be compliant with Schedule 2 of the Landfill Regulations 2002 (as amended). The submitted details shall include a plan clearly identifying where an engineered sidewall geological barrier is required The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	Prior to the acceptance of any additional waste materials but no later than 31 st July 2007
6	The Operator shall submit to the Agency for approval revised Surface Water Management and Contingency Action Plans including actions and amendments arising from implementation of 'Improvement Programme Requirements' (Table S1.3 References 2 & 11).	31 st July 2007
7	The operator shall carry out a survey of all existing external groundwater monitoring boreholes to demonstrate that they are fit for purpose. A report on the results of this survey, including replacement timescales, shall be provided to the Agency. Boreholes found not to be fit for purpose shall be replaced adjacent to the existing borehole in accordance with the Environment Agency LFTGN02 document "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water". Replacement boreholes shall be incorporated into relevant groundwater compliance and monitoring programmes.	28 th September 2007

Table S1.3 Improvement Programme Requirements

Reference	Requirement	Date
8	The operator shall carry out a survey of all existing gas monitoring boreholes to demonstrate that they are fit for purpose. A report on the results of this survey shall be provided to the Agency. The survey shall: • Confirm the level to which the gravel pack within the borehole extends beneath the waste surface; • Detail mitigation measures against the potential for gaseous exchange and release between the borehole and the atmosphere where the borehole gravel pack extends close to ground surface; • Propose additional measures to ensure that the existing gas monitoring boreholes are secure; • If the above cannot be fully completed, submit proposals, including timescales, to install new gas monitoring boreholes to comply with the requirements of the Landfill Regs and LF TGN03 'Guidance on the Management of Landfill Gas'. The proposals set out in the report shall be implemented by the Operator from the date of approval in writing by the Agency.	28 th September 2007
9	The Operator shall obtain 6 months of monthly groundwater monitoring data for boreholes BH1, BH2, BH3, BH4, BH5 and BH6. The Operator shall submit to the Environment Agency for approval a report that: • Reviews the existing and new groundwater monitoring data from these monitoring boreholes. • Undertakes a review of the Control Levels and Trigger Limits included in this Permit and provide a report to the Agency including, where justified, revised Control Levels and Trigger Limits for approval with appropriately justified determinands. The limits shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st March 2008
10	The Operator shall submit to the Agency for approval written proposals to ensure that the saturated groundwater table level will be maintained at all times below the base of the existing wastes already deposited at the site. A fully justified Compliance Limit for the maximum elevation of the managed water level in the quarry sump shall be proposed to the Agency for approval and for inclusion into the Permit. This Compliance Limit shall be below the lowest elevation of the base of the existing WML wastes, and determined from the new survey information required under Improvement Condition 16 (below). The proposals and quarry sump water level Compliance Limit shall be implemented by the Operator from the date of approval in writing by the Agency.	31 st March 2008

Table S1.3 Improvement Programme Requirements

Reference	Requirement	Date
11	The Operator shall submit to the Environment Agency for approval proposals for the additional management of surface water runoff and groundwater discharged from the site via the settlement ponds. These proposals shall ensure that adequate mitigation measures are in place to prevent against the potential sporadic releases of high concentrations of sulphate and other substances detected in waste samples above inert WAC from the site as detailed in Appendix E of the response to Schedule 4 Notice (dated 13/07/06). This shall include an appropriately designed, installed and maintained constructed wetland system as outlined in point 18 of the response to the Schedule 4 Notice, including the relocation of monitoring point 'SW2' to the outlet of the proposed constructed wetland system prior to water discharge to the adjacent surface water stream. These proposals shall also include review of the existing sump pumping regime. This shall include detailed consideration for improvement, including: • The removal of accumulated particulate matter / sediment from the base of the sump; • The appropriate disposal and re-circulation of pumped sump water onto the top of the existing waste mass during the initial pump start-up period. Trenches or other suitable features that allow infiltration of pumped water into the waste shall be considered; • Raising the level of the sump pump intake to limit the agitation of particulate matter / sediment from the sump base ingressing into the pump and subsequent discharged to the attenuation ponds/ release to the surface water stream. The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	31st March 2008
12	The Operator shall obtain 6 months of monthly gas monitoring data for boreholes BH1, BH2, BH3, BH4, BH5, GH1, GH2 and BH6. The Operator shall submit to the Environment Agency for approval a report that: • Reviews the existing and new gas monitoring data from these monitoring boreholes. • Undertakes a review of the Control Levels and Compliance Limits included in this Permit and provide a report to the Agency including, where justified, revised Control Levels and Compliance Limits for approval with appropriately justified determinands. The limits shall be implemented by the Operator from the date of approval in writing by the Agency.	31st March 2008
13	The Operator shall: • Acquire 6 months of monthly surface water monitoring data for locations SW1 and SW2, and using this new data: • Undertake a review of the quality determinands for surface water Control Levels and Compliance Limits where included in this Permit; • Provide a report to the Agency including, where justified, revised Control Levels and Compliance Limits with appropriately justified determinands for Agency approval. [Additional monitoring requirements for sulphate only are detailed in Reference 17, Table S1.3.] The proposals set out in the report shall be implemented by the Operator from the date of approval in writing by the Agency.	31st December 2007

Table S1.3 Improvement Programme Requirements

Reference	Requirement	Date
14	A drawing/plan shall be submitted to the Agency confirming all monitoring locations. This drawing/plan shall be annotated with clear and consistent nomenclature for all monitoring locations. The notification requirements of condition 2.5.2 shall be deemed to have been completed on submission of the drawing/plan. This and subsequent drawings/plans shall be updated and provided to the Agency immediately following changes and additions to the existing monitoring infrastructure.	31 st July 2007
15	The Operator shall submit to the Agency a Particulate Matter Management and Monitoring Plan. The management and monitoring plan shall fully identify the risks from the landfill activity covered by this permit, specify contingency actions and propose an appropriate monitoring regime in accordance with the Agency's guidance document – 'M17 - Monitoring of particulate matter in ambient air around waste facilities'. The plan shall be implemented by the Operator from the date of approval in writing by the Agency.	28 th September 2007
16	The Operator shall complete a new and full topographical survey for the site. The results of this survey shall be submitted to the Agency. This survey shall be provided on a fully annotated and scaled plan drawing, and include annotated or tabulated spot elevations for key features including, as a minimum, the following: • clear indication of the lowest elevations along all the boundaries of the existing wastes already deposited under WML, including the lowest elevation of the base of these existing wastes along the northern boundary of the wastes closest to the existing water sump; • the ground and casing levels at all borehole locations; • the quarry floor, water level(s) in the quarry sump, the existing wastes, the settlement ponds and associated features in the valley, and the stream/ stream water levels upgradient and downgradient of the site. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the drawing / plan. This and subsequent drawings / plans shall be updated and provided to the Agency immediately following changes and additions to the existing monitoring infrastructure.	31 st July 2007
17	The Operator shall complete additional time-series monitoring of water quality for sulphate (only) at discharge point SW2. This monitoring shall be completed immediately before, during and after completion of normal pumping operations from the quarry sump at fifteen minute intervals. This monitoring shall be completed on at least ten consecutive pumping occasions commencing no later than one month from the date of this Permit. After completion of this monitoring, these data shall be used to determine appropriate and fully-justified time-constrained Control Level and Trigger Limit for sulphate at discharge point SW2. The monitoring data and the time-constrained Control Level and Trigger Limit shall be submitted to the Agency for approval. The proposals set out in the report shall be implemented by the Operator from the date of approval in writing by the Agency.	28 th September 2007

Table S1.4 Annual waste input limits	
Category	Limit Tonnes/ Year
Inert Waste	75,000

Schedule 2 - Site plan



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Schedule 3 - List of permitted wastes

Inert wastes that may be accepted at Rhuddlan Bach Landfill Site without testing

EWC Code	Description	Restrictions
10 11 03	Waste glass based fibrous materials	Only without organic binders
17 01 01	Concrete	Selected C&D waste only ^(a)
17 01 02	Bricks	Selected C&D waste only ^(a)
17 01 03	Tiles and ceramics	Selected C&D waste only ^(a)
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Selected C&D waste only ^(a)
17 02 02	Glass	
17 05 04	Soil and stones	Excluding topsoil, peat; excluding soil and stones from contaminated sites
20 02 02	Soil and stones	Only from garden and parks waste; Excluding top soil, peat

- (a) Selected construction and demolition waste (C & D waste): with low contents of other types of materials (like metals, plastic, organics, wood, rubber, etc). The origin of the waste must be known.

No C & D waste from constructions, polluted with inorganic or organic dangerous substances, e.g. because of production processes in the construction, soil pollution, storage and usage of pesticides or other dangerous substances, etc., unless it is made clear that the demolished construction was not significantly polluted.

No C & D waste from constructions, treated, covered or painted with materials, containing dangerous substances in significant amounts.

Inert wastes that may be accepted at Rhuddlan Bach Landfill Site subject to testing and compliance with the inert waste acceptance criteria

EWC Code	Description
01 01 01	Wastes from mineral metaliferous excavation
01 01 02	Wastes from mineral non-metaliferous excavation
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 0 4 07
01 04 09	Waste sand and clays
10 13 14	Waste concrete and concrete sludge
17 05 06	Dredging spoil other than those mentioned in 17 05 05
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19 12 09	Minerals (for example sand and stones)

Schedule 4 – Emissions and monitoring

Table S4.1 Point Source Emissions to Water (Other than Sewer) – emission limits and monitoring requirements

Emission point Ref. & Location	Parameter	Source	Limits – maximum (incl unit)	Limits – other (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Discharge point 'SW2' at the outlet of existing settlement ponds as shown on drawing ES1580.902 dated July 2006.	Suspended Solids	Site drainage from the surface water and groundwater management system	266 mg/l	55 mg/l on any 2 consecutive occasions	Spot Sample	Monthly	In accordance with the application unless otherwise agreed in writing with the Environment Agency
	pH		>5 and <9 pH units	-			
	Oil or grease		None visible	-			
	Sulphate		859 mgSO ₄ /l	250 mgSO ₄ /l on any 3 consecutive occasions			
	Ammoniacal Nitrogen		7.4 mgNH ₄ - N/l	1.1 mgNH ₄ - N/l on any 3 consecutive occasions			
	Cadmium		0.36 µgCd/l	0.125 µgCd/l on any 3 consecutive occasions.			
	Mineral oil (C ₈ -C ₄₀)		0.01 mg/l	-			

Notes:

1. The above emission compliance limits are interim until specific limits for each monitoring point are agreed in accordance with Improvement Programme References 13 & 17.
2. Monitoring point SW2 to be relocated to the outlet of the proposed constructed wetland system prior to discharge to watercourse (to be installed under Improvement Programme Reference 11)

Table S4.2 Trigger levels for emissions into groundwater and monitoring

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
BH3 and BH5 (as identified on drawing no. ES1580.902 dated July 2006), and BH6 (to be installed under Improvement Programme Reference 4)	Ammoniacal Nitrogen	0.39 mg/l	Spot Sample	Monthly	In accordance with the application unless otherwise agreed in writing with the Environment Agency
	Iron	0.2 mg/l			
	Chromium	0.05 mg/l			
	Manganese	50 µg/l			
	Nickel	0.02 mg/l			
	Lead	10 mg/l			
	Sulphate	250 mg/l			
	Cadmium	0.1 µg/l			
	Mineral Oils (C ₈ -C ₄₀)	0.01 mg/l			
BH4 (as identified on drawing no. ES1580.902 dated July 2006)	Ammoniacal Nitrogen	5.4 mg/l			
	Iron	0.617 mg/l			
	Chromium	0.14459 mg/l			
	Manganese	950 µg/l			
	Nickel	0.09302 mg/l			
	Lead	20.16 µg/l			
	Sulphate	250 mg/l			
	Cadmium	0.91 µg/l			
	Mineral oil (C ₈ -C ₄₀)	0.01 mg/l			

Notes: The above trigger limits are interim until specific limits for each monitoring point are agreed in accordance with Improvement Programme Reference 9.

Table S4.3 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
BH1 as shown on drawing ES1580.902, dated July 2006	Methane	1 %v/v	Monthly, unless otherwise agreed in writing with the Environment Agency.	In accordance with the application unless otherwise agreed in writing with the Environment Agency
	Carbon Dioxide	19.8 %v/v		
BH2 as shown on drawing ES1580.902, dated July 2006	Methane	1.1 %v/v		
	Carbon Dioxide	5.1 %v/v		
BH3 as shown on drawing ES1580.902, dated July 2006	Methane	1 %v/v		
	Carbon Dioxide	3.1 %v/v		
BH4 as shown on drawing ES1580.902, dated July 2006	Methane	1.9 %v/v		
	Carbon Dioxide	6.0 %v/v		
BH5 and BH6 (to be installed under Improvement Programme Reference 4)	Methane	1 %v/v		
	Carbon Dioxide	1.5 %v/v		
Future external gas monitoring points (to be installed in accordance with point 23 of the response to the Schedule 4 Notice).	Methane	1 %v/v		
	Carbon Dioxide	1.5 %v/v		
BH1, BH2, BH3, BH4, BH5, BH6 (to be installed under Improvement Programme Reference 4) and future external gas monitoring points (to be installed in accordance with point 23 of the response to the Schedule 4 Notice).	Oxygen	No limit		
	Atmospheric pressure	No limit		
	Differential Pressure	No limit		
	Temperature	No limit		
	Meteorological Data	No limit		

Notes: Gas compliance limits are interim until monitoring point specific limits are agreed in accordance with Improvement Programme Reference 12.

Table S4.4 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
In-waste monitoring points GH1 and GH2 (as shown on drawing ES1580.902, dated July 2006). Representative number of samples taken from future in-waste (to be installed in accordance with point 23 of the response to the Schedule 4 Notice).	Methane	Monthly,	In accordance	No other specifications.
	Carbon Dioxide	unless	with the	
	Oxygen	otherwise	application unless	
	Atmospheric pressure	agreed in	otherwise agreed	
	Differential pressure	writing with	in writing with the	
	Temperature	the	Environment	
	Meteorological Data	Environment Agency.	Agency	

Table S4.5 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
Discharge point 'SW2' at the outlet of existing settlement ponds as shown on drawing ES1580.902 dated July 2006.	SO ₄	At 15 minute intervals immediately before, during and after completion sump pumping operations.	In accordance with the application unless otherwise agreed in writing with the Environment Agency.	To be completed on ten consecutive sump pumping operations commencing no later than one month after the date of this Permit during the interim period only, completed in accordance with Improvement Programme Reference 17.
Note: Monitoring point SW2 to be relocated to the outlet of the proposed constructed wetland system prior to discharge to watercourse (to be installed under Improvement Programme Reference 11).	pH, Oil & Grease, Temperature, Electrical Conductivity, Ammoniacal Nitrogen, Chloride, Dissolved Oxygen, Nitrate, COD, Total Suspended Solids, Fe, Cr, Mn, Ni, Pb, PO ₄ as P, SO ₄ , Cd, Mineral Oils (C ₈ -C ₄₀).	Monthly	In accordance with the application unless otherwise agreed in writing with the Environment Agency.	List I substances shall be screened to the MRV limits unless otherwise agreed in writing with the Environment Agency. These substances include Cd, Hg and Mineral Oils (C ₈ -C ₄₀), and other substances including PCBs and PAHs, as identified from inert WAC testing results, response to Schedule 4 Notice dated July 2006.
	BOD, Total Organic Carbon, Total Oxidised Nitrogen, Ca, Mg, Na, K, Alkalinity (CaCO ₃), Cu, Zn, Hg.	Quarterly		
	List I screening (including PCBs, PAHs)	Annually		
Point marked 'SW1' (as shown on drawing ES1580.902 dated July 2006)	pH, Oil & Grease, Temperature, Electrical Conductivity, Ammoniacal Nitrogen, Chloride, Dissolved Oxygen, Nitrate, COD, Total Suspended Solids, Fe, Cr, Mn, Ni, Pb, PO ₄ as P, SO ₄ , Cd, Mineral Oils (C ₈ -C ₄₀).	Monthly	In accordance with the application unless otherwise agreed in writing with the Environment Agency.	List I substances shall be screened to the MRV limits unless otherwise agreed in writing with the Environment Agency. These substances include Cd, Hg and Mineral Oils (C ₈ -C ₄₀).
	BOD, Total Organic Carbon, Total Oxidised Nitrogen, Ca, Mg, Na, K, Alkalinity (CaCO ₃), Cu, Zn, Hg.	Quarterly		

Table S4.6 Groundwater – other monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Groundwater monitoring points BH1, BH2, BH3, BH4, BH5 (as identified on ES1580.902 dated July 2006), BH6 (to be installed under Improvement Programme Reference 4), and other locations as required under Improvement Programme References 3 and 7.	Water level, pH, Electrical Conductivity, Ammoniacal Nitrogen, Nitrate, Fe, Cr, Mn, Ni, Pb, PO ₄ as P, SO ₄ , Cd, Mineral Oils (C ₈ -C ₄₀)	Monthly	In accordance with the application unless otherwise agreed in writing with the Environment Agency.	List I substances shall be screened to the MRV limits unless otherwise agreed in writing with the Environment Agency. These substances include Cd, Hg and Mineral Oils (C ₈ -C ₄₀), and other substances including PCBs and PAHs, as identified from inert WAC testing results, response to Schedule 4 Notice dated July 2006.
	Dissolved Oxygen, Ca, Cl, Total Organic Carbon, Total Oxidised Nitrogen, BOD, COD, Total Dissolved Solids, Mg, Na, K, Alkalinity (CaCO ₃), Cu, Zn, Hg.	Quarterly	Environment Agency.	
	List I screening (including PCBs, PAHs)	Annually		

Schedule 5 - Reporting

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

Table S5.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to water Parameters as required by condition 3.6.1	SW2 as indicated on drawing ES1580.902 dated July 2006, and/ or subsequently relocated under Improvement Programme Reference 11.	Every 3 Months	16 th March 2007
Groundwater Parameters as required by condition 3.6.1	BH1, BH2, BH3, BH4, BH5 as identified on ES1580.902 dated July 2006.	Every 3 Months	16 th March 2007
List 1 Screening		Annually	
Groundwater Parameters as required by condition 3.6.1	BH6 (to be installed under Improvement Programme Reference 4).	Every 3 Months	After date of installation.
List 1 Screening		Annually	
Landfill gas lateral migration Parameters as required by condition 3.6.1	BH1, BH2, BH3, BH4, BH5 as identified on ES1580.902 dated July 2006 and BH6 (to be installed under Improvement Programme Reference 4).	Every 3 Months	16 th March 2007
	Other gas monitoring points (to be installed in accordance with point 23 of the response to the Schedule 4 Notice).		After date of installation.
Other Landfill gas monitoring Parameters as required by condition 3.6.1	In waste boreholes GH 1 and GH2 (as shown on Drawing REGSPEC 12).	Every 3 Months	16 th March 2007
	Representative number of samples taken from future in-waste and external gas monitoring points (to be installed in accordance with point 23 of the response to the Schedule 4 Notice).		After date of installation.
Other surface water monitoring Parameters as required by condition 3.6.1	SW1 as indicated on drawing ES1580.902 dated July 2006.	Every 3 Months	16 th March 2007
	SW2, as indicated on drawing ES1580.902 dated July 2006, and/ or subsequently relocated under Improvement Programme Reference 11.	Every 3 Months	
List 1 Screening		Annually	

Table S5.2: Annual production/treatment

Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year
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Table S5.3 Reporting forms

Media/parameter	Reporting Format	Date of Form
Controlled water	Form water 1 or other reporting format to be agreed in writing with the Agency.	16 th March 2007
Groundwater	Form groundwater 1 or other reporting format to be agreed in writing with the Agency.	16 th March 2007
Landfill gas	Form gas 1 or other reporting format to be agreed in writing with the Agency.	16 th March 2007
Waste Return	Waste Return Form RATS2E	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Agency	

Schedule 6 - 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 PPC Regulations.

Part A

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

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution

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

(b) Notification requirements for the breach of a limit

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

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

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

Part B to be supplied as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of C & M Parry Plant Hire Limited

Schedule 7 - 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 4 to the PPC Regulations

“Authorised Officer” means any person authorised by the 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.
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site

“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.

“Fugitive emission” means an emission to air, water or land from the Activities which is not controlled by an emission or background concentration limit.

“Groundwater Regulations” means the Groundwater Regulations SI 1998 No. 2746, and words and expressions used in this permit which are also used in the Regulations shall have the same meanings as in those Regulations.

“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;

within the Site.

“Landfill Regulations” means the Landfill (England and Wales) Regulations SI 2002 No. 1559, and words and expressions used in this permit which are also used in the Regulations shall have the same meanings as in those Regulations.

“Land Protection Guidance” means Agency guidance “H7 - Guidance on the protection of land under the PPC Regime: Application site report and site protection monitoring programme”.

“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, September 2004.

“LFTGN 08” means Environment Agency Guidance for monitoring landfill gas engines, September 2004.

“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 alter the agreed design criteria, specification or performance in a way that has a negative effect.

"notify without delay" or "notified without delay" means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

"*PPC Regulations*" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

"*Relevant person*" and "*relevant conviction*" shall have the meanings given to them in the Environmental Protection Act 1990

"*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 Groundwater 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 Groundwater Regulations.

"*Technically competent management*" and "*technical competence*" shall have the meanings given to them in the Environmental Protection Act 1990.

"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.

END OF PERMIT