COPY

ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Lillyhall Landfill Stage 4

Waste Recycling Limited
Joseph Noble Road
Lillyhall
Workington
Cumbria
CA14 4JH

Permit number

DP3533LN

Lillyhall Landfill Stage 4
Permit Number DP3533LN

Introductory note

This introductory note does not form a part of the Permit

The main features of the installation are as follows.

The Installation is to be operated by Waste Recycling Limited (WRL) who also operate a number of waste management licences and a non-hazardous landfill on the same site.

The Installation is located on the Lillyhall Industrial Estate approximately 1700m to the Northeast of Distington Village. The site will comprise of an engineered landfill for the disposal of hazardous waste only. The landfill will be constructed of engineered clay with an artificial sealing liner underlain by Carbonifereous Coal Measures comprising sandstone, mudstone, ironstone and coal. Measures will be in place to collect leachate for treatment, control surface waters and to monitor the environment for emissions.

The Installation lies close to Distington Beck and is approximately 2.5km away from a European Habitats site.

The Operator is accredited with ISO 14001 and holds the relevant WAMITAB certificate.

Status Log of the Permit		
Detail	**Date**	**Response Date**
Application DP3533LN	Received 26/09/2005	
Application to transfer the application from Sharpet Ltd to Waste Recycling Ltd.	Duly made 26/09/2005	
Duly Made letter and Notice of Determination sent	Dated 4 November 2005	
Letter to WRL – extra information required	Dated 04 October 2005	12 October 2005
Permit determined	23/10/2006	

End of Introductory Note

Permit

Permit number
DP3533LN

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
Waste Recycling Limited ("the Operator"),

whose Registered Office is
GROUND FLOOR WEST
900 PAVILION DRIVE
NORTHAMPTON BUSINESS PARK
NORTHAMPTON
NORTHAMPTONSHIRE.
NN4 7RG

Company registration number 2674166

to operate an installation at
LILLYHALL LANDFILL STAGE 4
JOSEPH NOBLE ROAD
LILLYHALL
WORKINGTON
CUMBRIA
CA14 4JH

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

Signed	Date
	23/10/06

Stephen Hardy, Environment Management Team Leader, Southwest Team

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 26 May 2006 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 all of the following:

(a) the costs of setting up and operating the landfill;

(b) the costs of the financial provision required by condition 1.3.1; and

(c) the estimated costs for the closure and aftercare of the landfill.

1.4 Energy efficiency

1.4.1 The Operator shall:

(a) Review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the Activities; and

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

1.5 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 which is within the area edged in green that represents the land occupied by the Operator and referred to as the 'Waste Management Facility'.

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

2.4.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake monitoring for the parameters, at the locations and at not less than the frequencies specified, in the following tables in schedule 4 to this permit

(a) surface water specified in tables S4.2 and S4.8

(b) groundwater specified in table S4.3 and S4.9

(c) landfill gas specified in table S4.4

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 hazardous waste, and

(c) they are not liquid waste (including waste waters but excluding sludge), and

(d) they are not waste which in the conditions of landfill is explosive, corrosive, oxidising, highly flammable or flammable, and

(e) they are not hospital and other clinical infectious wastes from medical or veterinary establishments, 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 set out in Schedule 1 of the Landfill Regulations 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 where treatment would not reduce its quantity or the hazards which it poses to human health or the environment.

(k) Waste types 06 07 01, 06 13 04, 10 13 09, 15 01 11, 16 01 11, 16 02 12, 17 05 03, 17 06 01 and 17 06 05 or any other List Of Waste code that contain asbestos either as hazardous absolute or mirror entries in the List Of Waste MUST be landfilled in a separate cell.

2.8.2 The Operator shall visually inspect:

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

(b) waste at the point of deposit;

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

2.8.3 Where the Operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.

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

2.8.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ESID4 dated March 2004.

2.8.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in Schedule 1 Table S1.4.

2.8.7 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the Operator as commercially confidential shall be clearly identified in the record.

2.8.8 The Operator shall maintain and implement a system to record the disposal location of any hazardous waste.

2.9 Leachate levels

2.9.1 The limits for the level of leachate listed in Table S4.1 of Schedule 4 shall not be exceeded.

2.10 Closure, aftercare and decommissioning

2.10.1 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 Table S4.2 of Schedule 4.

3.1.2 The limits given in that Schedule shall not be exceeded, save that compliance with an emission limit shall include incorporation of the uncertainty allowance stated in Agency guidance LFTGN 05 and LFTGN 08.

3.1.3 Where a substance is specified in Table S4.2 of Schedule 4 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

3.1.4 No emission from the Permitted Installation shall be made to water except via the Operator's surface water management system as controlled under the PPC Permit for Lillyhall Landfill Stage 3 (Permit Ref. GP3037SJ).

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 Table S4.3 of Schedule 4 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 measured values from the monitoring specified in Table S4.5 of Schedule 4 shall not exceed the limits for the parameter(s) at the monitoring point(s) listed in that schedule.

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 Waste Management Facility, 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 noise and vibration.

3.6 Monitoring

3.6.1 The Operator shall, unless otherwise agreed in writing by the Agency, undertake monitoring for the parameters, at the locations at not less than the frequencies and in accordance with any other specifications specified in the following tables in Schedule 4 to this Permit:

(a) Leachate specified in Tables S4.1 and S4.7;

(b) Point source emissions specified in Table S4.2;

(c) Groundwater specified in Tables S4.3 and S4.9;

(d) Landfill gas specified in Tables S4.4, S4.5 and S4.6;

(e) Surface water specified in Table S4.8

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.

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) leachate levels, quality and quantities;

(iv) landfill gas generation and collection;

(v) waste types and quantities;

(vi) topographical surveys; and

(vii) the location of hazardous waste deposits; and

(viii) 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 held on the Waste Management Facility and 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 with the Application;

(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 energy consumed at the Site, reported in the format set out in Schedule 5 Table S5.3

(d) the water consumed at the Site, reported in the format set out in Schedule 5 Table S5.3;

(e) the annual production/treatment set out in Schedule 5 Table S5.2.

(f) details of any contamination or decontamination of the Site which has occurred;

(g) the topographical surveys required by condition 3.6.3 other than those submitted as part of a CQA validation report;

(h) 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;

(i) 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;

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

(k) the 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 Table S5.1 of Schedule 5;

(b) for the reporting periods specified in Table S5.1 of Schedule 5 and using the forms specified in Table S5.4 of Schedule 5; 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.

4.3 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 The Agency shall be given at least 14 days notice before implementing any part of the Site Closure Plan in respect of any activities other than the disposal of waste in the landfill.

4.3.5 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..

4.3.6 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.

4.3.7 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.

4.3.8 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.

4.3.9 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:

Where the Operator is a registered company:

(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) (a) , The disposal of waste in a landfill.	Landfill for hazardous waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling and disposal of wastes, consisting of the types and quantities specified in conditions 2.8, as an integral part of landfilling.
Associated Activity		
Leachate Management – leachate storage.	Storage of leachate pending treatment for disposal at another facility	Leachate arising from the Permitted landfill
Fuel Storage	storage of fuel for operation of plant and equipment	from fuel storage tank/ bowser to point of discharge/ disposal off site.

Table S1.2 Operating Techniques		
Description	**Parts**	**Date Received**
Application	The response to questions B2.1 and B2.2, B2.3, B2.4, B2.5, B2.9 and B2.11 given in pages/section B of the Application Excluding sections: B2.2.5, B2.2.6, B2.2.8, B2.2.9, B2.2.14-for the repeatable group for the cap, base and side slope engineering, B2.2.19-27, B2.2.31, B2.2.32, B2.2.36, B2.2.38, B2.2.39-42, B2.2.49, B2.2.53 B2.2.77-78. Section A - Drawings: ESID2, ESID3, ESID4 Section E – Nuisance and Health Risk Assessment – Tables only Section F- Habitat risk Assessment – All parts Volume 3 – Appendix 1 and Annex 1 Volume 3 – Appendix 8 – Expenditure Plan	14 April 2004
Response to Schedule 4 notice served 16 July 2004	Hydrogeological Risk Assessment Supplementary Report from Golder Associates-Excluding parts relating to sidewall liner design and the drainage blanket.	22 December 2004
Response to Schedule 4 notice served 16 July 2004	Section E – Nuisance and Health Risk Assessment – Tables only	22 December 2004
Response to Schedule 4 notice served 16 July 2004	Appendix 1-Waste Acceptance and Deposition and Landfill Body Monitoring Procedures, and Annex 1 - revised Permitted waste list	22 December 2004
Response to Schedule 4 notice served 16 July 2004	Section F-Revised Habitat risk Assessment	22 December 2004
Response to Schedule 4 notice served 16 July 2004	Revised Drawings: ESID2, ESID3, ESID4	22 December 2004

Table S1.3 Improvement Programme Requirements		
Reference	Requirement	Date
1A	The Operator shall submit to the Agency for approval a groundwater monitoring plan. The plan shall be in accordance with the Agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02) , and shall specify as a minimum: • The location, design and construction of groundwater monitoring boreholes at perimeter points outside of the waste. • The instalment of groundwater monitoring boreholes so that the response-zone straddles the water table. • Monitoring measurements and schedules, including frequency and parameters (as per Permit) • Monitoring techniques. • Compliance/trigger limits and action plan (as per Permit) • Construction quality assurance of the additional groundwater monitoring Installations. • Data management and reporting procedures. • Inspection and maintenance. • Details of sampling and on site analysis methodologies to include the following: • Sampling protocols • Analytical methods • Frequencies • Quality Assurance • Staff Competencies • Format and content of records The plan shall be implemented from the date of approval in writing from the Agency.	23/02/2007 Boreholes must be installed at the locations as agreed in writing with the Agency AND at least 3 background samples have been taken and analysed against the parameters in Table S4.9, before any waste is deposited in the cell.
1B	The Operator shall submit to the Agency for approval borehole specific groundwater monitoring data and establish baseline levels for each monitoring borehole using the first 12 months data obtained from the boreholes installed in accordance with improvement condition 1A. Baselines should be derived in accordance with Agency guidance "Hydrogeological Risk Assessment for Landfills" (LFTGN01)	Within 15 months of the commencement of borehole monitoring under condition 1A above.

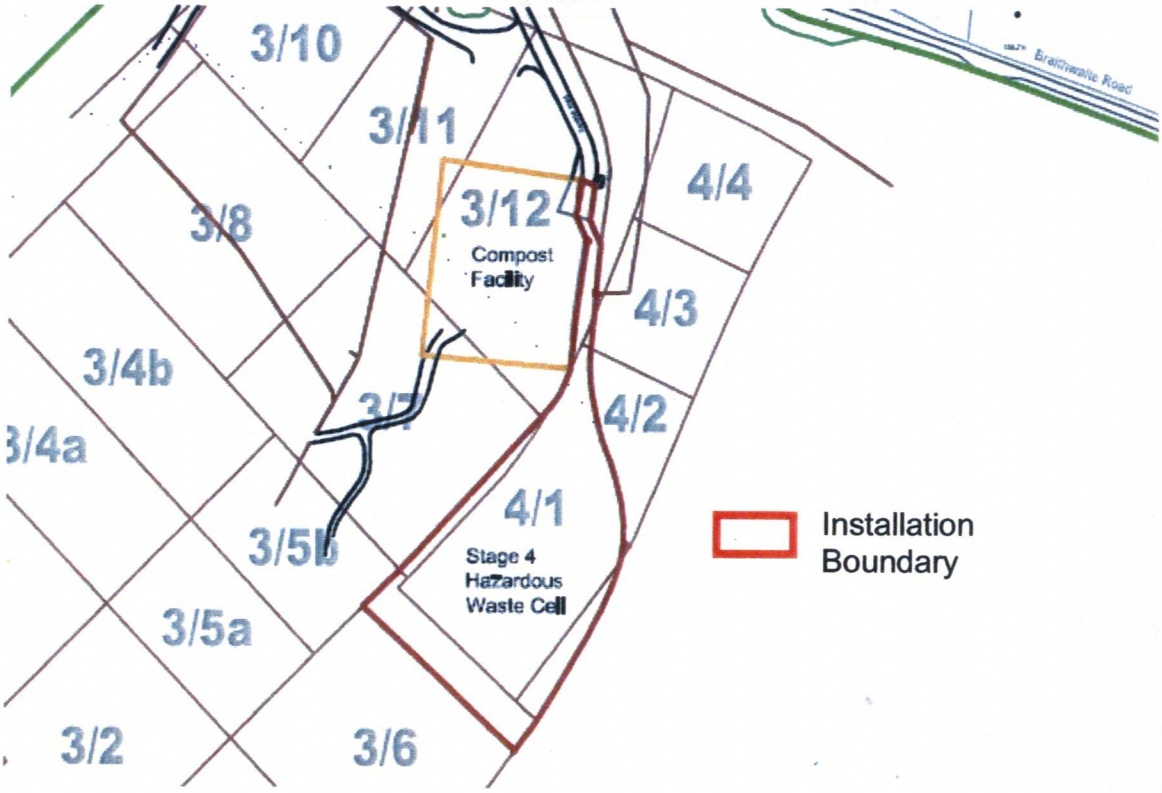
2A	The Operator shall submit to the Agency for approval, in writing, a gas management plan, to include: • The location, design and construction of in-waste gas monitoring points and external monitoring points outside of Stage 4 with timescales for installation. • Construction quality assurance of gas monitoring points. • In waste borehole monitoring frequency and parameters • Production of control and trigger levels for all in waste gas monitoring boreholes in accordance with the Agency's guidance, 'Guidance on the management of landfill gas' dated September 2004, unless other methodology is agreed in writing with the Agency • External borehole monitoring frequency and parameters • Data management and reporting procedures. • Inspection and maintenance procedures for in waste and external gas monitoring boreholes. • Monitoring, sampling and analysis techniques. The plan shall be implemented from the date of approval in writing from the Agency.	Gas Management Plan to be provided by 23/04/2007
2B	The Operator shall submit to the Agency for approval a report to include: • 12 months gas monitoring data from each external gas monitoring borehole installed in accordance with improvement condition 2A. • Background levels to be established for each external monitoring borehole in accordance with the Agency's guidance, 'Guidance on the management of landfill gas' dated September 2004, unless other methodology is agreed in writing with the Agency • An action plan for breaches of the trigger levels for external gas monitoring boreholes. The plan shall be implemented from the date of approval in writing from the Agency.	Within 15 months of the commencement of monitoring.

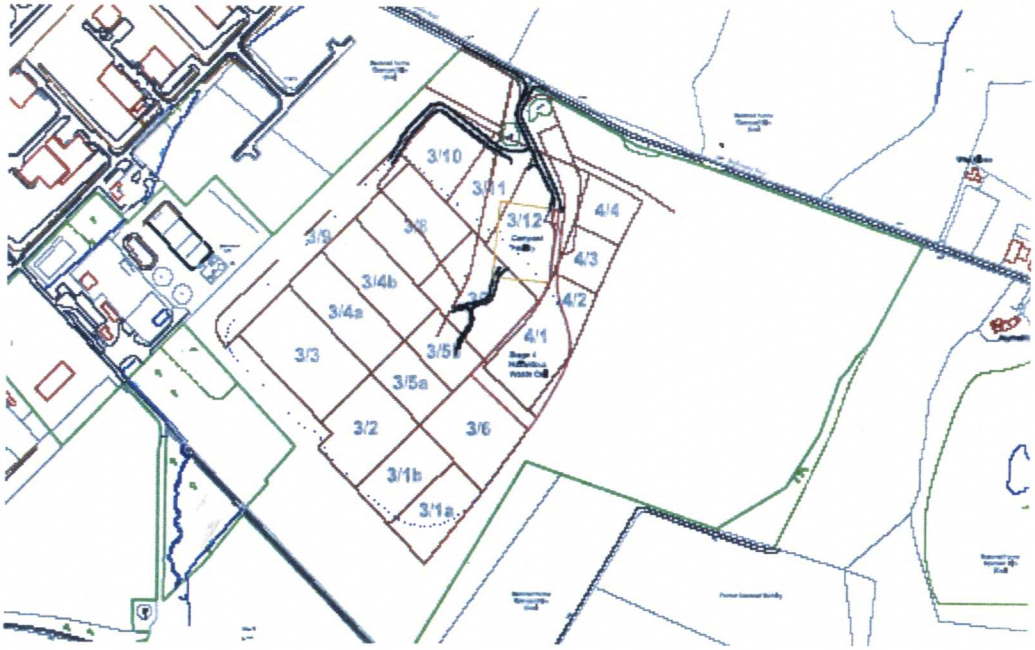
2C	The Operator shall submit to the Agency for approval a landfill gas management plan. The plan shall be in accordance with the Agency's Guidance on the Management of Landfill Gas" (LFTGN03), and shall specify as a minimum: • Gas production calculations using 12 months of monthly monitoring results from in-waste monitoring boreholes, • Comparison of gas generation potential with the assumed landfill gas risk assessment source term • An evaluation as to whether active gas management is required. Consideration shall be given to the use of a thermal oxidation or a low calorific burner or an oxidation system or a landfill gas flare. • Depending on the outcome of the above, propose a Gas extraction system and provide the plans and design to include; • Construction quality assurance; • Operational techniques; • Maintenance; • System Monitoring; • Contingency/Action plan; and • Data management and recording. • Monitoring, sampling and analysis techniques. The plan shall be implemented from the date of approval in writing from the Agency.	Within 15 months of the commencement of monitoring of the in-waste gas monitoring boreholes as required by condition 2A.
3	When the first 12 months of leachate monitoring are complete, the Operator shall submit to the Agency a report for approval on each of the following: • Comparison of leaching properties with assumed leachate source term in the Hydrogeological Risk Assessment and supplementary report; • Comparison of list I substances and their concentrations in the waste with the substances and levels assumed and assessed in the hydrogeological risk assessment; • Potential incompatibilities of wastes with other wastes and landfill infrastructure in particular artificial sealing liners and leachate drainage layers.	Within 15 months from the date of the first deposit of waste in the cell.

4	The Operator, having regard to the indicative BAT, shall submit a leachate management plan to the Agency for approval that details as a minimum: • How the leachate will be treated and that the method of treatment demonstrates BAT and that appropriate preventative measures are taken against pollution • Design and capacity of the leachate extraction, storage and transfer pipework with detailed plans. • Contingency plans to deal with heavy rainfall, limit exceedances and plant failure to include leachate extraction wells, pipework and pumps, storage and transfer pipework for the leachate from Stage 4. • The above leachate management and treatment plan shall be reviewed within 15 months of waste being deposited in the cell to ensure that there are procedures in place to cover the above that reflect the practices on site and ensure that the treatment of the leachate demonstrates BAT. The plan shall be implemented from the date of approval in writing from the Agency.	23/04/2007
5	The Operator shall review current particulate monitoring methods against Agency Monitoring Guidance Note M17. Where current methods are not in accordance with this Guidance. The Operator shall either provide an agreed timescale for adoption of the methods in M17 or justify not adopting these methods. A written report summarising this review and including any recommendations shall be submitted to the Agency for approval.	23/04/2007
6	The Operator shall submit to the Agency for approval a management plan for the control of birds, vermin and insects that details as a minimum: • measures in place to minimise and prevent the presence of birds, vermin and insects. • The maximum period for taking measures to control birds, vermin and insects arising from Stage 4 within and outside the boundary of the Waste Management Facility. • The criteria for closing the Permitted Installation to the waste streams identified in the risk assessment Table NHRA2 submitted with the Application. • The frequency and recording of visual inspections carried out at the Permitted Installation for the presence of birds, vermin and insects. • Details of the frequency at which pest control contractors visit the site. The plan shall be implemented from the date of approval in writing from the Agency.	23/04/2007

Table S1.4 Annual Waste Input Limits	
Category	**Limit Tonnes/ Year**
Hazardous Waste	20,000
Inert Waste for engineering including cover	15,000

Schedule 2 - Site plan





Not to scale

Schedule 3 - List of permitted wastes

Only wastes with six figure waste codes may be accepted.

01 WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS

01 03	**Wastes from Physical and Chemical Processing of Metalliferous Minerals**
01 03 05*	Other tailings containing dangerous substances
01 03 07*	Other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals
01 04	**Wastes from Physical and Chemical Processing of Non-Metalliferous Minerals**
01 04 07*	Wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals
01 05	**Drilling Muds and Other Drilling Wastes**
01 05 05*	Oil-containing drilling muds and wastes
01 05 06*	Drilling muds and other drilling wastes containing dangerous substances

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 08*	Agrochemical waste containing dangerous substances

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 04*	Sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances
03 02	**Wastes from Wood Preservation**
03 02 01*	Non-halogenated organic wood preservatives
03 02 02*	Organochlorinated wood preservatives
03 02 03*	Organometallic wood preservatives
03 02 04*	Inorganic wood preservatives
03 02 05*	Other wood preservatives containing dangerous substances

04 WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES

04 01	**Wastes from the Leather and Fur Industry**
04 01 03*	Degreasing wastes containing solvents without a liquid phase
04 02	**Wastes from the Textile Industry**
04 02 14*	Wastes from finishing containing organic solvents
04 02 16*	Dyestuffs and pigments containing dangerous substances
04 02 19*	Sludges from on-site effluent treatment containing dangerous substances

05 WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL

05 01	**Wastes from Petroleum Refining**
05 01 02*	Desalter sludges
05 01 03*	Tank bottom sludges
05 01 05*	Oil Spills
05 01 06*	Oily sludges from maintenance operations of the plant or equipment
05 01 08*	Other tars
05 01 09*	Sludges from on-site effluent treatment containing dangerous substances
05 01 11*	Wastes from cleaning of fuels with bases
05 01 15*	Spent filter clays
05 06	**Wastes from the Pyrolytic Treatment of Coal**
05 06 03*	Other tars

05 07	**Wastes from Natural Gas Purification and Transportation**
05 07 01*	Wastes containing mercury

06 WASTES FROM INORGANIC CHEMICAL PROCESSES

06 03	**Wastes from the MFSU of Salts and their Solutions and Metallic Oxides**
06 03 13*	Solid salts and solutions containing heavy metals
06 03 15*	Metallic oxides containing heavy metals
06 04	**Metal-Containing Wastes other than those Mentioned in 06 03**
06 04 03*	Wastes containing arsenic
06 04 04*	Wastes containing mercury
06 04 05*	Wastes containing other heavy metals
06 05	**Sludges from On-Site Effluent Treatment**
06 05 02*	Sludges from on-site effluent treatment containing dangerous substances
06 07	**Wastes from the MFSU of Halogens and Halogen Chemical Processes**
06 07 01*	Wastes containing asbestos from electrolysis
06 07 02*	Activated carbon from chlorine production
06 07 03*	Barium sulphate sludge containing mercury
06 08	**Wastes from the MFSU of Silicon and Silicon Derivatives**
06 08 02*	Wastes containing dangerous silicones
06 09	**Wastes from the MSFU of Phosphorous Chemicals and Phosphorous Chemical Processes**
06 09 03*	Calcium-based reaction wastes containing or contaminated with dangerous substances
06 10	**Wastes from the MFSU of Nitrogen Chemicals, Nitrogen Chemical Processes and Fertiliser Manufacture**
06 10 02*	Wastes containing dangerous substances
06 13	**Wastes from Inorganic Chemical Processes not Otherwise Specified**
06 13 01*	Inorganic plant protection products, wood-preserving agents and other biocides
06 13 02*	Spent activated carbon (except 06 07 02)
06 13 04*	Wastes from asbestos processing
06 13 05*	Soot

07 WASTES FROM ORGANIC CHEMICAL PROCESSES

07 01	**Wastes from the Manufacture, Formulation, Supply and Use (MFSU) of Basic Organic Chemicals**
07 01 07*	Halogenated still bottoms and reaction residues
07 01 08*	Other still bottoms and reaction residues
07 01 09*	Halogenated filter cakes and spent absorbents
07 01 10*	Other filter cakes and spent absorbents
07 01 11*	Sludges from on-site effluent treatment containing dangerous substances
07 02	**Wastes from the MFSU of Plastics, Synthetic Rubber and Man-Made Fibres**
07 02 07*	Halogenated still bottoms and reaction residues
07 02 08*	Other still bottoms and reaction residues
07 02 09*	Halogenated filter cakes and spent absorbents
07 02 10*	Other filter cakes and spent absorbents
07 02 11*	Sludges from on-site effluent treatment containing dangerous substances
07 02 14*	Wastes from additives containing dangerous substances
07 02 16*	Waste containing dangerous silicones
07 03	**Wastes from the MFSU of Organic Dyes and Pigments (except 06 11)**
07 03 07*	Halogenated still bottoms and reaction residues
07 03 08*	Other still bottoms and reaction residues
07 03 09*	Halogenated filter cakes and spent absorbents
07 03 10*	Other filter cakes and spent absorbents
07 03 11*	Sludges from on-site effluent treatment containing dangerous substances
07 04	**Wastes from the MFSU of Organic Plant Protection Products (except 02 01 08 and 02 01 09), Wood Preserving Agents (except 03 02) and other Biocides**
07 04 07*	Halogenated still bottoms and reaction residues
07 04 08*	Other still bottoms and reaction residues
07 04 09*	Halogenated filter cakes and spent absorbents
07 04 10*	Other filter cakes and spent absorbents
07 04 11*	Sludges from on-site effluent treatment containing dangerous substances
07 04 13*	Solid wastes containing dangerous substances

07 05	**Wastes from the MFSU of Pharmaceuticals (**see note below)**
07 05 07*	Halogenated still bottoms and reaction residues
07 05 08*	Other still bottoms and reaction residues
07 05 09*	Halogenated filter cakes and spent absorbents
07 05 10*	Other filter cakes and spent absorbents
07 05 11*	Sludges from on-site effluent treatment containing dangerous substances
07 05 13*	Solid wastes containing dangerous substances
	** Waste medicinal products listed in the Chapter 07.05.XX are not permitted.
07 06	**Wastes from the MFSU of Fats, Grease, Soaps, Detergents, Disinfectants and Cosmetics**
07 06 07*	Halogenated still bottoms and reaction residues
07 06 08*	Other still bottoms and reaction residues
07 06 09*	Halogenated filter cakes and spent absorbents
07 06 10*	Other filter cakes and spent absorbents
07 06 11*	Sludges from on-site effluent treatment containing dangerous substances
07 07	**Wastes from the MFSU of Fine Chemicals and Chemical Products not Otherwise Specified**
07 07 07*	Halogenated still bottoms and reaction residues
07 07 08*	Other still bottoms and reaction residues
07 07 09*	Halogenated filter cakes and spent absorbents
07 07 10*	Other filter cakes and spent absorbents
07 07 11*	Sludges from on-site effluent treatment containing dangerous substances

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 11*	Waste paint and varnish containing organic solvents or other dangerous substances
08 01 13*	Sludges from paint or varnish containing organic solvents or other dangerous substances
08 01 15*	Aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
08 01 17*	Wastes from paint or varnish removal containing organic solvents or other dangerous substances
08 01 19*	Aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances
08 01 21*	Waste paint or varnish remover
08 03	**Wastes from MFSU of Printing Inks**
08 03 12*	Waste ink containing dangerous substances
08 03 14*	Ink sludges containing dangerous substances
08 03 17*	Waste printing toner containing dangerous substances
08 04	**Wastes from MFSU of Adhesives and Sealants (including waterproofing products)**
08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 11*	Adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 13*	Aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances
08 05	**Wastes not Otherwise Specifies in 08**
08 05 01*	Waste isocyanates

09 WASTES FROM THE PHOTOGRAPHIC INDUSTRY

09 01	**Wastes from the Photographic Industry**
09 01 06*	Wastes containing silver from on-site treatment of photographic wastes

10 WASTES FROM THERMAL PROCESSES

10 01	**Wastes from Power Stations and Other Combustion Plants (except 19)**
10 01 04*	Oil fly ash and boiler dust
10 01 13*	Fly ash from emulsified hydrocarbons used as fuel
10 01 14*	Bottom ash, slag and boiler dust from co-incineration containing dangerous substances
10 01 16*	Fly ash from co-incineration containing dangerous substances
10 01 18*	Wastes from gas cleaning containing dangerous substances
10 01 20*	Sludges from on-site effluent treatment containing dangerous substances
10 01 22*	Aqueous sludges from boiler cleansing containing dangerous substances
10 02	**Wastes from the Iron and Steel Industry**
10 02 07*	Solid wastes from gas treatment containing dangerous substances
10 02 11*	Wastes from cooling-water treatment containing oil
10 02 13*	Sludges and filter cakes from gas treatment containing dangerous substances
10 03	**Wastes from Aluminium Thermal Metallurgy**
10 03 04*	Primary production slags
10 03 08*	Salt slags from secondary production
10 03 09*	Black drosses from secondary production
10 03 17*	Tar containing wastes from anode manufacture
10 03 19*	Flue-gas dust containing dangerous substances
10 03 21*	Other particulates and dust (including ball-mill dust) containing dangerous substances
10 03 23*	Solid wastes from gas treatment containing dangerous substances
10 03 25*	Sludges and filter cakes from gas treatment containing dangerous substances
10 03 27*	Wastes from cooling-water treatment containing oil
10 03 29*	Wastes from treatment of salt slags and black drosses containing dangerous substances
10 04	**Wastes from Lead Thermal Metallurgy**
10 04 01*	Slags from primary and secondary production
10 04 02*	Dross and skimmings from primary and secondary production
10 04 03*	Calcium arsenate
10 04 04*	Flue-gas dust
10 04 05*	Other particulates and dust
10 04 06*	Solid wastes from gas treatment
10 04 07*	Sludges and filter cakes from gas treatment
10 04 09*	Wastes from cooling-water treatment containing oil
10 05	**Wastes from Zinc Thermal Metallurgy**
10 05 03*	Flue-gas dust
10 05 05*	Solid wastes from gas treatment
10 05 06*	Sludges and filter cakes from gas treatment
10 05 08*	Wastes from cooling-water treatment containing oil
10 06	**Wastes from Copper Thermal Metallurgy**
10 06 03*	Flue-gas dust
10 06 06*	Solid wastes from gas treatment
10 06 07*	Sludges and filter cakes from gas treatment
10 06 09*	Wastes from cooling-water treatment containing oil
10 07	**Wastes from Silver, Gold and Platinum Thermal Metallurgy**
10 07 07*	Wastes from cooling-water treatment containing oil
10 08	**Wastes from Other Non-Ferrous Thermal Metallurgy**
10 08 08*	Salt slag and primary and secondary production
10 08 12*	Tar-containing wastes from anode manufacture
10 08 15*	Flue-gas dust containing dangerous substances
10 08 17*	Sludges and filter cakes from flue-gas treatment containing dangerous substances
10 08 19*	Wastes from cooling-water treatment containing oil
10 09	**Wastes from Casting of Ferrous Pieces**
10 09 05*	Casting cores and moulds which have not undergone pouring containing dangerous substances
10 09 07*	Casting cores and moulds which have undergone pouring containing dangerous substances
10 09 09*	Flue-gas dust containing dangerous substances
10 09 11*	Other particulates containing dangerous substances
10 09 13*	Waste binders containing dangerous substances
10 09 15*	Waste crack-indicating agent containing dangerous substances
10 10	**Wastes from Casting of Non-Ferrous Pieces**
10 10 05*	Casting cores and moulds which have not undergone pouring containing dangerous substances
10 10 07*	Casting cores and moulds which have undergone pouring containing dangerous substances

10 10 09*	Flue-gas dust containing dangerous substances
10 10 11*	Other particulates containing dangerous substances
10 10 13*	Waste binders containing dangerous substances
10 11	**Wastes from Manufacture of Glass and Glass Products**
10 11 09*	Waste preparation mixture before thermal processing, containing dangerous substances
10 11 11*	Waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 13*	Glass-polishing and –grinding sludge containing dangerous substances
10 11 15*	Solid wastes from flue-gas treatment containing dangerous substances
10 11 17*	Sludges and filter cakes from flue-gas treatment containing dangerous substances
10 11 19*	Solid wastes from on-site effluent treatment containing dangerous substances
10 12	**Wastes from Manufacture of Ceramic Goods, Bricks, Tiles and Construction Products**
10 12 09*	Solid wastes from gas treatment containing dangerous substances
10 12 11*	Wastes from glazing containing heavy metals
10 13	**Wastes from Manufacture of Cement, Lime, Plaster and Articles and Products made from them**
10 13 09*	Wastes from asbestos-cement manufacture containing asbestos
10 14	**Waste from Crematoria**
10 14 01*	Waste from gas cleaning containing mercury

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 o Metals and Other Materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)**
11 01 09*	Sludges and filter cakes containing dangerous substances
11 01 13*	Degreasing wastes containing dangerous substances
11 01 15*	Eluate and sludges from membrane systems or ion exchange systems containing dangerous substances
11 01 16*	Saturated or spent ion exchange resins
11 01 98*	Other wastes containing dangerous substances
11 02	**Wastes from Non-Ferrous Hydrometallurgical Processes**
11 02 02*	Sludges from zinc hydrometallurgy (including jarosite, goethite)
11 02 05*	Wastes from copper hydrometallurgical processes containing dangerous substances
11 02 07*	Other wastes containing dangerous substances
11 03	**Sludges and Solids from Tempering Processes**
11 03 02*	Other wastes
11 05	**Wastes from Hot Galvanising Processes**
11 05 03*	Solid wastes from gas treatment
11 05 04*	Spent flux

12 WASTES FROM SHAPING AND PHYSICAL 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 12*	Spent waxes and fats
12 01 14*	Machinery sludges containing dangerous substances
12 01 16*	Waste blasting material containing dangerous substances
12 01 18*	Metal sludge (grinding, honing and lapping sludge) containing oil
12 01 20*	Spent grinding bodies and grinding materials containing dangerous substances
12 03	**Wastes from Water and Steam Degreasing Processes (except 11)**
12 03 02*	Steam degreasing wastes

13 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in Chapters 5, 12 and 19)

13 05	**Oil/Water Separator Contents**

13 05 01*	Solids from grit chambers and oil/water separators
13 05 02*	Sludges from oil/water separators
13 05 03*	Interceptor sludges
13 05 08*	Mixtures of wastes from grit chambers and oil/water separators
13 08	**Oil Wastes not Otherwise Specified**
13 08 01*	Desalter sludges or emulsions

14 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 7 and 8)

14 06	**Waste Organic Solvents, Refrigerants and Foam/Aerosol Propellants**
14 06 04*	Sludges or solid wastes containing halogenated solvents

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 10*	Packaging containing residues of or contaminated by dangerous substances
15 01 11*	Metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers
15 02	**Absorbents, Filter Materials, Wiping Cloths and Protective Clothing**
15 02 02*	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

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 07*	Oil filters
16 01 08*	Components containing mercury
16 01 11*	Brake pads containing asbestos
16 01 21*	Hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 02	**Wastes from Electrical and Electronic Equipment**
16 02 12*	Discarded equipment containing free asbestos
16 02 13*	Discarded equipment containing hazardous components[1] other than those mentioned in 16 02 09 to 16 02 12
16 02 15*	Hazardous components removed from discarded equipment
16 03	**Off-Specification Batches and Unused Products**
16 03 03*	Inorganic wastes containing dangerous substances
16 03 05*	Organic wastes containing dangerous substances
16 05	**Gases in Pressure Containers and Discarded Chemicals**
16 05 06*	Laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
16 05 07*	Discarded inorganic chemicals consisting of or containing dangerous substances
16 05 08*	Discarded organic chemicals consisting of or containing dangerous substances
16 06	**Batteries and Accumulators**
16 06 02*	Ni-Cd batteries
16 06 03*	Mercury-containing batteries
16 07	**Wastes from Transport Tank, Storage Tank and Barrel Cleaning (except 05 and 13)**
16 07 08*	Wastes containing oil
16 07 09*	Wastes containing other dangerous substances
16 08	**Spent Catalysts**
16 08 02*	Spent catalysts containing dangerous transition metals[2] or dangerous transition metal compounds

[1] Hazardous components from electrical and electronic equipment may include accumulators and batteries mentioned in 16 06 and marked as hazardous mercury switches, glass from cathode ray tubes and other activated glass, etc.

16 08 07*	Spent catalysts contaminated with dangerous substances
16 11	**Waste Linings and Refractories**
16 11 01*	Carbon-based and refractories from metallurgical processes containing dangerous substances
16 11 03*	Other linings and refractories from metallurgical processes containing dangerous substances
16 11 05*	Linings and refractories from non-metallurgical processes containing dangerous substances

[3] For the purpose of this entry, transition metals are: scandium, vanadium, manganese, cobalt, copper, yttrium, niobium,

hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum, and tantalum. These metals are

dangerous if they are classified as dangerous substances. The classification of dangerous substances shall determine which among those transition metals and which transition metal compounds are hazardous.

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 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
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 04*	Glass, plastic and wood containing or contaminated with dangerous substances
17 03	**Bituminous Mixtures, Coal Tar and Tarred Products**
17 03 01*	Bituminous mixtures containing coal tar
17 03 03*	Coal tar and tarred products
17 04	**Metals (including their alloys)**
17 04 09*	Metal waste contaminated with dangerous substances
17 04 10*	Cables containing oil, coal tar and other dangerous substances
17 05	**Soil (including excavated soil from contaminated sites), Stones and Dredging Spoil**
17 05 03*	Soil and stones containing dangerous substances
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 05 05*	Dredging spoil containing dangerous substances
17 05 07*	Track ballast containing dangerous substances
17 06	**Insulation Materials and Asbestos-Containing Construction Materials**
17 06 01*	Insulation materials containing asbestos
17 06 03*	Other insulation materials consisting of or containing dangerous substances
17 06 05*	Construction materials containing asbestos [3]
17 08	**Gypsum-Based Construction Material**
17 08 01*	Gypsum-based construction materials contaminated with dangerous substances
17 09	**Other Construction and Demolition Wastes**
17 09 01*	Construction and demolition wastes containing mercury
17 09 02*	Construction and demolition wastes containing PCB (for example, PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazed units, PCB-containing capacitors)
17 09 03*	Other construction and demolition wastes (including mixed wastes) containing dangerous substances

[4] As far as the landfilling of waste is concerned, Member States may decide to postpone the entry into force of this entry

until the establishment of appropriate measures for the treatment and disposal of waste from construction material

containing asbestos. These measures are to be established according to the procedure referred to in Article 17 of

Council Directive 1999/31/EC on the landfill of waste (OJ L 182, 16.7.1999, p. 1) and shall be adopted by 16 July 2002 at the latest.

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 06*	Chemicals consisting of or containing dangerous substances
18 02	**Wastes from Research, Diagnosis, Treatment or Prevention of Disease involving Animals**
18 02 05*	Chemicals consisting of or containing dangerous substances

19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE

19 01	**Wastes from Incineration or Pyrolysis of Waste**
19 01 05*	Filter cake from gas treatment
19 01 07*	Solid wastes from gas treatment
19 01 10*	Spent activated carbon from flue-gas treatment
19 01 11*	Bottom ash and slag containing dangerous substances
19 01 13*	Fly ash containing dangerous substances
19 01 15*	Boiler dust containing dangerous substances
19 01 17*	Pyrolysis wastes containing dangerous substances
19 02	**Wastes from Physico/Chemical Treatments of Waste (including dechromatation, decyanidation, neutralisation)**
19 02 04*	Premixed wastes composed of at least one hazardous waste
19 02 05*	Sludges from physico/chemical treatment containing dangerous substances
19 02 11*	Other wastes containing dangerous substances
19 03	**Stabilised/Solidified Wastes**[4]
19 03 04*	Wastes marked as hazardous, partly[5] stabilised
19 03 06*	Wastes marked as hazardous, solidified
19 04	**Vitrified Waste and Wastes from Vitrification**
19 04 02*	Fly ash and other flue-gas treatment wastes
19 04 03*	Non-vitrified solid phase
19 08	**Wastes from Waste Water Treatment Plants not Otherwise Specified**
19 08 06*	Saturated or spent ion exchange resins
19 08 07*	Solutions and sludges from regeneration of ion exchanges
19 08 08*	Membrane system waste containing heavy metals
19 08 11*	Sludges containing dangerous substances from biological treatment of industrial waste water
19 08 13*	Sludges containing dangerous substances from other treatment of industrial waste water
19 10	**Wastes from Shredding of Metal-Containing Wastes**
19 10 03*	Fluff-light fraction and dust containing dangerous substances
19 10 05*	Other fractions containing dangerous substances
19 11	**Wastes from Oil Regeneration**
19 11 01*	Spent filter clays

[4] 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.

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

19 11 05*	Sludges from on-site effluent treatment containing dangerous substances
19 11 07*	Wastes from flue-gas cleaning
19 12	**Wastes from the Mechanical Treatment of Waste (for examples sorting, crushing, compacting, palletising) not Otherwise Specified**
19 12 06*	Wood containing dangerous substances
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
19 13	**Wastes from Soil and Groundwater Remediation**
19 13 01*	Solid wastes from soil remediation containing dangerous substances
19 13 03*	Sludges from soil remediation containing dangerous substances
19 13 05*	Sludges from groundwater remediation containing dangerous substances

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 19*	Pesticides
20 01 21*	Fluorescent tubes and other mercury-containing waste
20 01 27*	Paint, inks, adhesives and resins containing dangerous substances
20 01 29*	Detergents containing dangerous substances
20 01 33*	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components[6]
20 01 37*	Wood containing dangerous substances
20 02	**Garden and Park Wastes (including cemetery waste)**
20 02 02	Soil and stones

Schedule 4 – Emissions and monitoring

Table S4.1 Leachate level limits and monitoring requirements			
Monitoring point reference/ Description	**Limit**	**Monitoring frequency**	**Monitoring method**
Depth to base of cell	N/A	Monthly	Metres AOD
Leachate Level Monitoring points to be agreed in accordance with Improvement condition 4 in Table S1.3.	1.5 Metres above base of cell**	Weekly* Except when the landfill is in 'storm conditions' then the leachate level will be monitored daily.** Daily* – except weekends and bank holidays.	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)

* The leachate levels within the Installation shall be monitored from the date of the monitoring point Installation at the intervals identified.

** The head of leachate shall not be permitted to exceed 1.5 metres above the base of the cell, except when in 'storm conditions' when the head of leachate shall not be permitted to exceed 2 metres above the base of the cell for the 7 days following the recording of rainfall equal to or above the storm trigger level of >35mm of rain in 24hrs.

Table S4.2 Point Source Emissions to Water (Other than Sewer) – emission limits and monitoring requirements					
Emission point Ref. & Location	**Parameter**	**Source**	**Limit (incl unit)**	**Monitoring Frequency & Reference Period**	**Monitoring Standard or Method**
Location SP1 as identified on drawing number L401/Water.Drainage./1 dated 12/05/2005	Suspended Solids	Surface runoff from unengineered areas	50 mg/l	Monthly Spot Sample	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	pH	Surface runoff from unengineered areas	>5 and <9 pH units	Monthly Spot Sample	

Table S4.3 Trigger levels for emissions into groundwater and monitoring requirements						
Monitoring point reference	**Parameter**	**Control Level (mg/l)**	**Trigger Level (including unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
Monitoring point locations to be approved in accordance with conditions 2.5 and Table S1.3 (1A)	Ammoniacal Nitrogen	0.33	8 (mg/l)	Spot Sample	Monthly	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	Chloride	35.5	110 (mg/l)	Spot Sample	Monthly	
	Nickel	0.062	0.175 (mg/l)	Spot Sample	Monthly	
	Cd	none	0.1 (ug/l)	Spot Sample	Quarterly	
	Naphthalene	None	0.5 (ug/l)	Spot Sample	Quarterly	
	Mecoprop	None	0.04 (ug/l)	Spot Sample	Quarterly	
	Mercury	None	0.01 (ug/l)	Spot Sample	Quarterly	
	Toluene	None	4 (ug/l)	Spot Sample	Quarterly	

Table S4.4 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description	**Parameter**	**Limit above background (including units)***	**Monitoring frequency**	**Monitoring standard or method**
Monitoring points to be installed in accordance with Table S1.3 (2A)	Methane	1%v/v **	Monthly	In accordance with the Agency Guidance on the Management of Landfill Gas (LFTGN03)
	Carbon Dioxide	1.5 %v/v **		
	Oxygen	no limit		
	Atmospheric pressure	no limit		
	Differential Pressure	no limit		
	Temperature	no limit		
	Meteorological data	no limit		

*The limits specified take account of the agreed background concentrations

** Background concentrations as approved in accordance with improvement condition 2B in Table S1.3.

Table S4.5 Landfill gas from capped surfaces - monitoring requirements			
Monitoring point Ref. /description	**Parameter**	**Monitoring frequency**	**Monitoring Standard or method**
Permanently capped zone	Average Methane flux	Annually	As agreed in writing with the Agency.
Temporarily capped zone	Average Methane flux	Annually	As agreed in writing with the Agency.

Table S4.6 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 to be installed in accordance with Table S1.3 (2A)	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Differential pressure Temperature Meteorological Data	Monthly	In accordance with the Agency Guidance on the Management of Landfill Gas (LFTGN03)	In accordance with the Agency Guidance on the Management of Landfill Gas (LFTGN03)

Table S4.7 Leachate– other monitoring requirements			
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency/ Units**	**Monitoring standard or method**
Monitoring of leachate to commence from the date of installation of the leachate chimney and/ or monitoring point in accordance with condition 2.5 and Table S4.1 and Table S1.3(4).	Conductivity (µ S/cm), Temperature (°C), pH (pH units), Leachate Volume (m^3),	Monthly	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	Ammoniacal Nitrogen, Chloride, Sulphate, Alkalinity ($CaCO_3$), Phenols, COD, BOD, TOC, TON, Na, K, Ca, Mg	Monthly mg/l	
	Ni, Mn, Fe, Cr, Cd, Cu, Zn, Pb, Hg, Mecoprop, Toluene, Naphthalene	Monthly µ g/l	
	List 1 screen	Annually	

Table S4.8 Surface water – other monitoring requirements			
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency/ Units**	**Monitoring standard or method**
Location SP1 as identified on drawing number L401/Water.Drainage. /1 dated 12/05/2005	Conductivity (µ S/cm), Temperature (°C), pH (pH units), Leachate Volume (m^3), Visible oils and greases	Monthly	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	Ammoniacal Nitrogen, Chloride, Total Suspended Solids	Monthly mg/l	
	Ni	Monthly µ g/l	
Continued....			

Table S4.8 Surface water – other monitoring requirements			
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency/ Units**	**Monitoring standard or method**
	COD, DO, Alkalinity ($CaCO_3$), Sulphate, Phenols, TON, Na, K, Ca, Mg	Quarterly mg/l	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	Cr, Cd, Mn, Fe, Cu, Zn, Pb, Hg	Quarterly µ g/l	
	Mecoprop, Naphthalene, Toluene	Annually µ g/l	

Table S4.9 Groundwater – other monitoring requirements			
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency/ Units**	**Monitoring standard or method**
WMBH 1, 12, 14, 15, 16, 17 (as shown on Figure 1 dated 13 December 2004) and locations as approved under condition S1.3 (1A)	Water level(Metres AOD), Conductivity (µ S/cm), pH (pH units), Temperature(°C), Ammoniacal Nitrogen, Chloride, Nickel, COD	Monthly	In accordance with the Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)
	Sulphate, Alkalinity ($CaCO_3$), Phenols, TON, Na, K, Ca, Mg, Cr, Mn, Fe, Cu, Zn, Pb, Hg, Cd	Quarterly mg/l	
	Naphthalene, Mecoprop, Toluene	Annually µg/l	

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**
Leachate levels As required by condition 3.6.1 and S4.1	Refer to S4.1	Quarterly	23/10/2006
Emissions to water Parameters as required by condition 3.6.1 and S4.2	Refer to S4.2	Quarterly	23/10/2006
Groundwater Parameters as required by condition 3.6.1 and S4.3	Monitoring point locations to be approved in accordance with conditions 2.5 and Table S1.3 (1A)	Quarterly	23/10/2006
Landfill gas surface emissions Parameters as required by condition 3.6.1 and S4.5	To commence once temporary/final cap is in place. Refer to S4.5	Annually	23/10/2006
Particulate matter Parameters as required by condition 3.6.1 and S1.3(5)	Refer to S1.3(5)	As agreed in accordance with S1.3(5)	23/10/2006
Landfill Gas Monitoring-External Parameters as required by condition 3.6.1 and S4.4	Monitoring points to be installed in accordance with Table S1.3 (2A).	Quarterly	23/10/2006
Landfill gas monitoring- In waste Parameters as required by condition 3.6.1 and S4.6	In waste monitoring points to be installed in accordance with Table S1.3 (2A).	Quarterly	23/10/2006
Other leachate monitoring Parameters as required by condition 3.6.1 and S4.7 Except: List 1 Screen	Leachate monitoring points to be installed in accordance with Table S1.3 (4).	Quarterly Annually	23/10/2006 23/10/2006
Other groundwater monitoring Parameters as required by condition 3.6.1 and S4.9 Except: mecoprop, Naphthalene, toluene	WMBH 1, 12, 14, 15, 16, 17 (as shown on Figure 1 dated 13 December 2004) and locations as approved under conditions S1.3 (1A)	Quarterly Annually	23/10/2006 23/10/2006
Other surface water monitoring: Parameters as required by condition 3.6.1 and S4.8 except : mecoprop, Naphthalene, toluene	Refer to S4.8	Quarterly Annually	23/10/2006 23/10/2006

Table S5.2: Annual Production/Treatment	
Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant; Re-circulated 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 S5.3 Performance Parameters			
Parameter	**Frequency of assessment**	**Annual total**	**Unit**
Potable water use	Annually		Cubic metres
Energy used	Annually		MWh of electricity
Non potable water use	Annually		Cubic metres

Table S5.4 Reporting Forms		
Media/parameter	**Reporting Format**	**Date of Form**
Controlled water	Reporting format to be agreed in writing with the Agency	
Groundwater	Reporting format to be agreed in writing with the Agency	
Landfill gas	Reporting format to be agreed in writing with the Agency	
Leachate	Reporting format to be agreed in writing with the Agency	
Waste summary	Form Waste Return E1	
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	**DP3533LN**
Name of Operator	**Waste Recycling Limited**
Location of Installation	**Lillyhall Landfill Stage 4, Joseph Noble Road, Lillyhall**
	Workington, Cumbria. CA14 4JH
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 Waste Recycling 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.

"*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.

"notify/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.

"*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 (LOW)(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