



Template Permit for the Landfill Sector

Permit with introductory note

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

LAMBY WAY LANDFILL SITE
The County Council of the City and
County of Cardiff
Lamby Way
Rumney Moors
Cardiff CP3 8EQ

Permit number

JP3239ST

Contents

Introductory note	ii
Permit	1
Conditions.....	1
1. General.....	1
2. Operating conditions.....	5
3 Records	20
4 Reporting.....	21
5 Notifications	23
6 Interpretation.....	24
Schedule 1 - Notification of abnormal emissions.....	26
Schedule 2 - Reporting of monitoring data	28
Schedule 3 - Forms to be used	31
Schedule 4 - Reporting of performance data.....	32
Schedule 5 - Site Plan.....	33
Schedule 6 - List of Permitted Wastes.....	34

Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 6 of the Landfill (England and Wales) Regulations 2002 (S.I.2002 No.1559) ("the Landfill Regulations") and Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate part of an installation carrying out activities covered by the description in Section 5.2 A(1)(a) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit: i.e.

- (a) The disposal of waste in a landfill receiving more than 10 tonnes of waste in any day or with a total capacity of more than 25,000 tonnes, excluding disposals in landfills taking only inert waste.

There may be some activities on the installation to which BAT applies because they are not Landfill activities. Therefore, in some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to the appropriate Horizontal guidance and other relevant guidance.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows;

Lamby Way Landfill is a large landfill which has operated since 1973 and covers 74Ha in total. The landfill forms the Stationary Technical Unit for the purposes of the PPC Regulations. The installation also includes the activities of fuel storage, leachate treatment, leachate disposal and landfill gas utilisation and flaring. The landfill gas utilisation and flaring are authorised by another permit (FP3238SL) issued to Novera Energy Generation No.2 Limited, as during the application process it was established that they were a separate operator from the operation of the landfill.

Lamby Way Landfill consists of two area's. Lamby Way South (LWS) was operated between 1973 and August 2000 and covers 46 Ha. Waste was placed directly onto the estuarine alluvium. Perimeter drains were set up and discharged through discharge pipes A, B and C into the Rhymney River and Severn Estuary. LWS was capped in three phases with a low permeability cap. Lamby Way Eastern Extension covers an area of 28 Ha and commenced landfilling in 2000 and will operate as seven phases. The cell bases are cut into the estuarine alluvium. It is provided with some cell drainage and a perimeter drainage system that culminates in outfall D which discharges to the Severn Estuary although arrangements were in hand to treat this and discharge it to sewer. LWS was licensed by the Waste Management Licence EAWML/30066 and LWEE held EAWML/30235. The Discharge Consents were held for outfalls A, B, C and D.

As an effect of the PPC Permit the new basal areas of the site will be provided with an artificial sealing liner and enhanced basal drainage. Discharges of untreated leachate through outfalls A, B, C and D are no longer permitted. The site has undergone a formal review to ensure its compliance with the requirements of the Habitats Regulations due to its proximity to the Severn Estuary pSAC, SPA and Ramsar designations.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
Novera Energy Generation No.2 Limited	FP3238SL	09/03/2005

Superseded Licences/Authorisations/Consents relating to this installation

Holder	Reference Number	Date of Issue
Cardiff City Council	AN0049201	17/11/1992
Cardiff City Council	AN0049202	17/11/1992
Cardiff City Council	AN0049203	17/11/1992
Cardiff County Council	AN0289201	27/05/1999
Cardiff County Council	EAWML30235	09/06/2000
Cardiff City Council	EAWML30066	30/07/1992

Other non-PPC activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit. These are listed in the Table below, they include the composting area and the MRF. These activities include:

Other existing Licences/Authorisations/Registrations relating to this site

Holder	Reference Number	Date of Issue
Cardiff County Council	EAWML/30213	07/09/2001
City and County of Cardiff County Council	EAWML/30338	24/03/2005

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit. As the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Dates
Application JP3239ST	Received 08/11/2004
Response to request for information	Request dated 23/03/2005 Response received 26/05/2004
Permit determined	12/09//2005

End of Introductory Note.

Permit

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



**ENVIRONMENT
AGENCY**

Permit

Permit number
JP3239ST

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 **The County Council of the City and County of Cardiff** ("the Operator"),

Of/ whose Registered Office (or principal place of business) is

**County Hall
Atlantic Wharf
Cardiff Bay
Cardiff
CF10 4UW**

to operate part of an installation at

**Lamby Way Landfill Site
Lamby Way
Rumney Moors
Cardiff
CF3 8EQ**

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

The landfill authorised by this Permit is for the disposal of non-hazardous waste

Signed

Date

	<i>12 September 2005</i>
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Emily Finney

Team Leader Permitting – Aust

Authorised to sign on behalf of the Agency

Conditions

1. General

1.1 Permitted Activities

- 1.1.1 The Operator is authorised to carry out the activities and the directly associated activities specified in Table 1.1.1.

Table 1.1.1

Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 5.2Part A(1) (a) The disposal of waste in a landfill.	Landfill for non-hazardous waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling, storage and disposal of non-hazardous wastes, consisting of the types and quantities specified in condition 2.1.2, as an integral part of landfilling.
Associated Activity		
Leachate Management. Physico-Chemical treatment of leachate	Storage and treatment of leachate in a facility with a capacity of <50 t/day, pre-disposal or recovery	Leachate arising from the Permitted landfill
Landfill gas management	Management of landfill gas through collection and delivery for utilisation or flaring. This includes collection and disposal of condensate.	Landfill gas arising from the Permitted landfill
Leachate discharges to foul sewers	Discharge of leachate from the landfill.	From leachate management system to point of entry to sewer
Water discharges to controlled waters	Discharge of surface water 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	From fuel storage tank/ bowser to point of discharge.

- 1.1.2. Where waste on site is subjected to activities that are not subject to the permit but are controlled under the Waste Management Licensing Regulations 1994 then the area of the installation on which these activities take place shall be clearly identified and such waste shall be kept separate from the waste activities authorised by this permit. A record shall be kept of where such activities are conducted.

1.2 Site

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in red on the Site Plan at Schedule 5 to this Permit. The additional area indicated in green on the Site Plan combined with the area in red, represents the extent of the installation as a whole.

1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a written management system and organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

- 1.4.1. The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table and shall send written notification of the date of completion of each requirement to the Agency on submission or within 14 days of the completion of each such requirement.

Reference	Requirement	Date
1a	The Operator shall install additional groundwater monitoring boreholes as required along the south and south west periphery of the installation boundary in order to establish a peripheral network around the entire landfill boundary. The spacing between boreholes shall be no more than 100 metres downgradient and shall be in accordance with EA Guidance LFTGN02 "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water". The distance of each borehole from the edge of the waste margin shall be no less than 10 metres.	Within 12 months of Permit issue date
1d	The operator shall commence routine monitoring at all new landfill gas and groundwater monitoring points.	Immediately following installation of borehole
1c	The operator shall review the groundwater monitoring data for all boreholes and provide revised trigger and control levels to the Agency for agreement. Derivation of control and trigger levels will be undertaken in accordance with the guidance on statistical analysis provided in the Agency's Guidance on Hydrogeological Risk Assessments for Landfills and the derivation of groundwater control and trigger levels (LFTGN01).	Within 12 months of borehole installation
2a	The discharges of leachate to the Rhymney River and Severn Estuary shall stop and the pipes carrying the leachate shall be sealed off.	Immediately on issue of Permit
2b	Gain written agreement from Agency that the pipes carrying the leachate have been adequately sealed off	Within 1 month of permit issue date

- 1.4.2. Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 it shall send written notification of such failure to the Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique and relevant provisions in the Application and the Site Protection and Monitoring Programme, as the case may be shall be deemed to be amended.

1.6 Pre-Operational Conditions

- 1.6.1 No disposal of wastes shall take place in any part of the Permitted Installation
- identified for non hazardous waste, or
- where waste deposit commences after the issue of this Permit unless:
- 1.6.1.1 at least 4 weeks prior to the commencement of construction of that part the operator has submitted to the Agency in writing the detailed design, material specifications and the construction quality assurance (CQA) programme for the pre-operational engineering of the:
- liners
 - leachate collection layer
 - leachate abstraction system
 - separation bund/ layer
 - pipework
- for that part and that it is confirmed in writing by the Agency that these are in conformance with the relevant specifications set out in section 2 of Part B of the Application, any other specification agreed in writing by the Agency and any subsequent agreed change to the specification(s); and

- 1.6.1.2 the operator has notified the Agency in writing of any changes in the detailed design, material specifications and the CQA programme that are to be made during the construction and in advance of those changes being made the Agency has agreed in writing that these are acceptable in relation to the relevant specifications set out in Part B of the Application any other specification agreed in writing by the Agency and any subsequent agreed changes under 1.6.1.1; and
- 1.6.1.3 the pre-operational engineering and infrastructure as listed in 1.6.1.1, have been completed and validated in accordance with the documented CQA procedures, and
- 1.6.1.4 the operator has submitted the validation report in writing to the Agency; and
- 1.6.1.5 the Agency has inspected the relevant part to ensure that it complies with the relevant conditions of the landfill permit, and has confirmed in writing that it has no objection to that part becoming operational.

1.7 Off-site Conditions

- 1.7.1 There are no off-site conditions

2. Operating conditions

2.1 Landfilling Controls

- 2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Form (excluding the response to questions B2.2.1, B2.2.2, B2.2.8, B2.2.9 of the original application) and supplementary information in Folder 4 of the application that revised the earlier application..	8/11/2004 and 30/12/2004

- 2.1.2 The non-landfill activities of the Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time), or as otherwise agreed in writing by the Agency.
- 2.1.3 Wastes shall only be accepted for disposal on the site if they are listed in Schedule 6, all relevant waste acceptance procedures have been completed and the waste is in the 'category or type' permitted in table 2.1.2 below;

Table 2.1.2 : Wastes accepted for disposal	
Waste Category or Type	Permitted or not Permitted
Hazardous	Not Permitted
Non-hazardous	Permitted unless otherwise excluded by further details below; Excluding Waste Types where the European Waste Catalogue classification ends in "99" unless otherwise agreed with the Agency Excluding the following pharmaceutical waste types 18 01 08, 18 01 09, 18 02 07, 18 02 08, 20 01 31 and 20 01 32. Excluding medicinal products with the following EWC: 07 05 13 and 07 05 14 or any starting 07 05 XX
Non-hazardous	Permitted, Landfill leachate, 190703, only for disposal and storage at the treatment plant.
Gypsum (and other high sulphate bearing waste)	Not permitted
Inert	Permitted Excluding waste types where the European Waste Catalogue classification given ends in "99" unless a written description of any proposed waste to be accepted under such a code has been submitted to and approved in writing by the Agency and the waste accords to that description.
Liquid wastes (including waste waters but excluding sludge).	Not permitted.
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.	Not permitted unless non-hazardous when permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007
Whole used tyres (other than tyres used as engineering materials, bicycle tyres and tyres with an outside diameter of more than 1400mm.	Permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007

Table 2.1.2 : Wastes accepted for disposal	
Waste Category or Type	Permitted or not Permitted
Shredded used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm.	Permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007
Any waste which does not fulfil the relevant waste acceptance criteria.	Permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007
Waste which has been diluted or mixed solely to meet the relevant waste acceptance criteria.	Permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007
Wastes which have not been treated, except for: Inert wastes for which treatment is not technically feasible; or It is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment.	Permitted until a date to be specified in Regulations and if no date so specified no later than 31 st March 2007

And

- 2.1.2.1 The operator of the landfill shall visually inspect the waste at the entrance to the landfill and at the point of the deposit and shall satisfy himself that it conforms to the description provided in the documentation submitted by the holder. Any waste which does not conform with the description provided, shall be refused and the Agency notified in accordance with condition 5.1.1
- 2.1.2.2 All waste approved under condition 2.1.2 shall be characterised in accordance with Regulations to meet Waste Acceptance Criteria and Procedures. The operator shall provide written confirmation to the Agency, in the quarterly report required by condition 4.1.8, that such characterisation has been undertaken. Any information provided under this condition shall be included within the annual report required by condition 4.1.3.
- 2.1.2.3 The operator shall ensure that where representative samples are taken for analysis they are taken in accordance with Regulations, to meet Waste Acceptance Criteria and Procedures. The samples taken shall be retained for at least one month and results of any analysis for at least one year.
- 2.1.3 The operator on accepting each delivery of waste shall provide a written receipt to the person delivering it.
- 2.1.4 The operator shall ensure that the landfill is secured to prevent free access to the site and the gates of the landfill must be locked outside operating hours.
- 2.1.5 The total quantity of waste that shall be deposited in the landfill shall not exceed 9,480,000 tonnes.
- 2.1.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits and acceptance ratios in Table 2.1.3 below.

Table 2.1.3 Annual Waste Input Limits	
Category	Limit Tonnes/ Year
Hazardous Waste	Not Permitted
Non-hazardous Waste	425,000
Stable, non-reactive hazardous waste	Not Permitted
Inert Waste	180,000
Inert Waste for restoration of closed areas	0

2.1.7 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, origin, date of delivery, the identity of the producer (or in the case of municipal waste (as defined by the Landfill Regulations), the collector) of any waste that is received for disposal or recovery at the Permitted Installation.

2.2 Emissions

2.2.1 Emissions to Air, (excluding Odour, Noise or Vibration) from Specified Points

2.2.1.1 Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.

2.2.1.2 There are no specific controls imposed upon emissions to air in Part 2.2.1 of this Permit. Controls on such emissions are included in Parts 2.2.4, 2.2.6 and 2.2.7.

2.2.1.3 No condition applies.

2.2.2 Emissions to water (other than groundwater), from specified points

2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

Emissions to Water (other than to Sewer)

2.2.2.2 Conditions 2.2.2.3 - 6 shall not apply to emissions to sewer.

2.2.2.3 Emissions to water from the emission point(s) specified in Table 2.2.4 shall only arise from the source(s) specified in that Table.

Table 2.2.4: Emission point to water

Emission Point Reference and/or location description	Source	Receiving Water
Surface water discharge points shown on drawing 01499/120	Surface water drainage from the installation	Rhymney River

2.2.2.4 The limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 2.2.5 shall not be exceeded.

Table 2.2.5 : Emission limits to water and monitoring

Emission point reference	Parameter	Limit	Monitoring frequency	Monitoring method
Surface water discharge points shown on drawing 01499/120	Ammonia	0.17 mg/l	Monthly	To be Agreed with the Environment Agency
	BOD	3.35 mg/l	Monthly	To be Agreed with the Environment Agency
	Oils and greases	No visible trace	Weekly	To be Agreed with the Environment Agency

2.2.2.5 Where a substance is specified in Table 2.2.5 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

2.2.2.6 No condition applies

Emissions to sewer

2.2.2.7 Emissions to sewer from the specified emission points in Table 2.2.6 shall only arise from the sources specified in that Table.

Table 2.2.6 Emission points to sewer

Emission point reference or description	Source	Sewer
Effluent Treatment Plant	Effluent treatment plant for landfill leachate	Welsh Water plc

2.2.2.8 The limits for the emissions to sewer for the parameter(s) and emission point(s) set out in Table 2.2.7 shall not be exceeded.

Table 2.2.7: Emission limits and monitoring frequency to sewer

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Effluent Treatment Plant	Volumetric only	150 m3 per day 10 litres per second	Quarterly	

2.2.2.9 Where a substance is specified in Table 2.2.7 but no limit is set for it, the concentration of such substance in emissions to sewer from the relevant emission point shall be no greater than the background concentration.

2.2.3. Emissions to groundwater

- 2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application.
- 2.2.3.4 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in Table 2.2.8 shall not be exceeded. Any levels that are marked to be agreed with the Agency shall be agreed within 6 months of the borehole being installed.

Table 2.2.8: The trigger levels for emissions into groundwater

Emission point reference	Substance	Limit (including Reference Period)mg/l	Monitoring frequency	Monitoring method
C2	Ammoniacal Nitrogen	1.1mg/l	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l	Every 4 months	
	Mecoprop	0.00005 mg/l	Every 4 months	
	M, p-xylene	0.001 mg/l	Every 4 months	
C3	Ammoniacal Nitrogen	5.4 mg/l	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l	Every 4 months	
	Mecoprop	0.00005 mg/l	Every 4 months	
	M, p-xylene	0.001 mg/l	Every 4 months	
C4	Ammoniacal Nitrogen	0.4 mg/l	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l	Every 4 months	
	Mecoprop	0.00005 mg/l	Every 4 months	
	M, p-xylene	0.001 mg/l	Every 4 months	
C5	Ammoniacal Nitrogen	3.6 mg/l	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l	Every 4 months	
	Mecoprop	0.00005 mg/l	Every 4 months	
	M, p-xylene	0.001 mg/l	Every 4 months	
C6	Ammoniacal Nitrogen	13.4 mg/l	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l	Every 4 months	
	Mecoprop	0.00005 mg/l	Every 4 months	
	M, p-xylene	0.001 mg/l	Every 4 months	
Additional Groundwater Monitoring Boreholes	Ammoniacal Nitrogen	To be agreed With the Agency	Monthly	To be agreed with the Environment Agency
	Cadmium	0.0005 mg/l	Every 4 months	
	Nickle	0.02 mg/l		
	Mecoprop	0.00005 mg/l		
	M, p-xylene	0.001 mg/l		

- 2.2.3.5 Subject to the terms of this condition, the activities of disposal, or tipping for the purpose of disposal, of waste, that are authorised by this landfill permit shall cease 3½ years from date of issue of this Permit, unless by that date the operator has submitted to the Agency a written review of the Hydrogeological Risk Assessment submitted as part of the original Application for the permit.

The Risk Assessment review shall include a review of the responses in Section 1.2.1 to 1.2.10 of Part B of that original application. The written review shall show whether at the specified date, the level of risk to groundwater meets the terms of the Groundwater Regulations 1998.

Within six months of receipt of the written review the Agency shall reply in writing to the operator either confirming that the above requirements have been met and authorising continuation of disposal activities or that activities of disposal or tipping for the purpose of disposal of waste authorised by this permit shall cease until the operator can show that, the level of risk to groundwater meets the terms of the Groundwater Regulations 1998.

In the event that the continuation of activities is authorised in accordance with this condition beyond 4 years following the date of granting of this Permit, they shall cease on every fourth anniversary thereafter, unless, by each of those dates, the operator has submitted to the Agency a further written review of the Hydrogeological Risk Assessment which shows that, at the specified dates, the level of risk to groundwater meets the terms of the Groundwater Regulations.

The reviews submitted to the Agency shall include the results of any investigations and reviews carried out, and, in particular, reviews of the following aspects of the Hydrogeological Risk Assessment:

Recommendations of the essential technical precautions which must be taken, paying particular attention to the nature and concentration of the substances present in the matter being disposed of or tipped, the characteristics of the receiving environment and the proximity of the water catchment areas, in particular those for drinking, thermal and mineral water;

Recommendations of the technical precautions necessary:

- i In the case where groundwater is considered to be permanently unsuitable for other uses, to ensure that no substance in list I can reach other aquatic ecosystems or harm other ecosystems, to ensure that the presence of any list I substance once discharged into the groundwater will not impede exploitation of ground resources and to prevent pollution of groundwater by list II substances; and
- ii in the case where groundwater is not considered to be permanently unsuitable for other uses, to prevent any discharges into groundwater of substances in list I and to prevent any pollution of groundwater by substances in list II.

2.2.4 Fugitive emissions of substances to air

2.2.4.1 The Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- open surfaces, unfilled, operational and filled landfill surfaces
- storage areas
- buildings
- pipes, valves and other transfer systems

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.4.2 The Operator shall use all appropriate measures so as to prevent or where that is not practicable to reduce emissions of landfill gas, litter and particulate matter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:

- all structures under or over ground
- surfacing
- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

2.2.6.1 The Operator shall ensure that all appropriate measures, including BAT, are taken to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

- controlling operational activities to minimise the generation of odour
- limiting the use of odorous materials
- restricting odorous activities
- controlling the storage conditions of odorous materials
- optimising the performance of abatement systems
- timely monitoring, inspection and maintenance
- employing, where appropriate, an approved odour management plan
- leachate storage or treatment in containers

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.7 Emissions to Land

- 2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.
- 2.2.7.2 No emission from the Permitted installation shall be made to land
- 2.2.7.3 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit

2.3 Management and Fit and Proper Person

- 2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

Training

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
 - 2.3.6.1 a written or electronic maintenance programme; and
 - 2.3.6.2 records of its maintenance.

Incidents and Complaints

- 2.3.7 The Operator shall maintain and implement written procedures for:
 - 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits and if such event occur;
 - 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
 - 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

Fit and Proper Person

- 2.3.9 Where Regulation 4 of the Regulations applies to a relevant activity/ associated activity carried on at the Permitted Installation, as authorised under condition 1.1.1:
- 2.3.9.1 Any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence shall be submitted to the Agency in writing within 5 working days of the change in management. Technically competent management and technical competence shall be as prescribed under Section 74 of the Environmental Protection Act 1990.
- 2.3.9.2 In the event of the Operator and/or any relevant person being convicted of any relevant offence and which is in addition to any already notified to the Agency, then full details shall be provided to the Agency within 14 days of conviction, whether or not the conviction is subsequently appealed. Such details shall include , in respect of each relevant person (as defined in section 74(7) of the Environmental Protection Act 1990 or any subsequent amendments to that section), the nature of the offence, the place and date of conviction, any sentence, and any fine or other penalty imposed; and
- 2.3.9.3 In the event that the Operator and/or any relevant person lodges an appeal against any such conviction, the Operator shall notify the Agency of this within 14 days of the lodging. The Operator shall notify the Agency of the results of that appeal, within 14 days of the appeal being decided; and
- 2.3.9.4 The financial provision for meeting the obligations under this Permit set out in the [Operator's letter dated (include a serial number for identification) / Agreement made between the Operator and the Agency dated] 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.
- 2.3.10 The operator shall ensure that the charges it makes for the disposal of waste in the landfill covers all of the following
- (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 2.3.9.4; and
 - (b) the estimated costs for the closure and after-care of the landfill site for a period of at least 60 years from its closure.

2.4 Efficient use of raw materials

- 2.4.1 The Operator shall:
- 2.4.1.1 maintain the raw materials table or description submitted in response to Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
- 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and

- 2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

- 2.5.1 No condition applies except as covered by the requirements in 2.1.1.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be recycled or recovered unless technically and/or economically impossible.
- 2.6.2 No condition applies
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.

2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information listed in Table S4.2 at Schedule 4.
- 2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Notes as from time to time amended. Energy efficiency shall be secured in particular by:
- ensuring that the appropriate operating and maintenance systems are in place;
 - ensuring that all plant is adequately insulated to minimise energy loss or gain;
 - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
 - ensuring employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
 - where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Notes; and
 - maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Notes.

2.8 Accident prevention and control

- 2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in response to Section 2.3.4 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Permitted Installation shall be designed, operated and maintained, using BAT for the non-landfill parts of the installation, so as to avoid reasonable cause for annoyance from noise or vibration, in particular by:
- equipment maintenance e.g. fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation e.g. silencers, barriers, enclosures;
 - timing and location of noisy activities and vehicle movements;
 - periodic checking of noise emissions, either qualitatively or quantitatively; and
 - maintenance of building fabric.
- Provided always that the techniques used by the operator shall be no less effective than those described in the application, where relevant

2.10 On Site Monitoring

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 (air), 2.2.5 (water), 2.2.7 (sewer), 2.2.8 (groundwater), 2.13.2 (effluent treatment plant) unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of conditions.
- 2.10.2 No condition applies.
- 2.10.2 No condition applies.
- 2.10.4 No condition applies.

Monitoring - General

- 2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.
- 2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes 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.
- 2.10.7 No condition applies.
- 2.10.8 There shall be provided:
- 2.10.8.1 safe means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, when required by the Agency unless otherwise specified in that Schedule; and
- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Agency.

- 2.10.10 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:
- 2.10.10.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and
- 2.10.10.2 report that site reference data to the Agency unless otherwise agreed in writing by the Agency.

Landfill Gas

- 2.10.11 The Operator shall carry out monitoring of the parameters listed in Table 2.10.11 at the specified monitoring points and at least at the frequencies specified in that table.

Table 2.10.11 Landfill gas trigger levels

Monitoring point reference/description	Parameter	Trigger	Frequency
LFG 1 – 13	Methane	1.2% v/v	Weekly
	Carbon Dioxide	1.7% v/v	Weekly
Additional LFG boreholes	Methane	1% above agreed background concentrations	
	Carbon Dioxide	1.5% above agreed background concentrations	

Leachate

- 2.10.12 The leachate levels within the installation shall be monitored from the date of the monitoring point installation at monthly intervals at the locations identified in Table 2.10.12. The head of leachate shall not be permitted to exceed 1 metre above the base of the cells within the cells of the site known as Lamby Way Eastern Extension and 2 metres above the base of the site for the area of the site known as Lamby Way South.
- 2.10.12 The Operator shall carry out monitoring of leachate quality at the monitoring points and for the parameters listed in Table 2.10.12 to the frequencies and methods described in that Table. The following composition control levels shall apply:

Table 2.10.12 Leachate monitoring

Monitoring point reference/description	Parameter And Control Level Mg/l	Frequency	Test method	
L1, L2, L3	NH4	- 904	Monthly	To be agreed with The Environment Agency
	Chloride	- 1306		
	Nickel	- 0.4		
	Cadmium	- 0.05		
	Mecoprop	- 0.024		
	Xylene	- 0.032		
L4, L5, L6	NH4	- 1370	Monthly	To be agreed with The Environment Agency
	Chloride	- 13713		
	Nickel	- 0.3		
	Cadmium	- 0.3		
	Mecoprop	- 0.14		
	Xylene	- 0.208		

SL1, SL2, SL3, SL4, SL5, SL6, SL7, SL8, SL9	NH4	- 1370	Monthly	To be agreed with The Environment Agency
	Chloride	- 13713		
	Nickel	-0.1		
	Cadmium	-0.1		
	Mecoprop	-0.029		
	Xylene	-0.032		

2.11 Closure, Aftercare and Decommissioning

2.11.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

Table 2.11.1: Closure, Aftercare and Decommissioning techniques		
Description	Parts	Date Received
Application	The response to questions 2.5 in Part B of the application form.	

2.11.2 Where the above Table refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the later document(s) shall prevail to the extent of such conflict.

2.11.3 In respect of activities on the installation which are not Listed in Section 5.2 Part 1 A(1)(a) or (b) of Schedule 1 of the PPC Regulations, the Operator shall maintain and operate these activities so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:

- attention to the design of new plant or equipment;
- the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out.; and
- the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.

2.11.4 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.

2.11.5 The Operator shall implement the site closure plan on receipt of a notice from the Agency approving definitive closure of the landfill or part thereof.

2.11.6 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan in respect of any non-landfill activities.

2.12 Multiple Operator installations

2.12.1 There are no conditions as a result of the interactions of the Permits covering this installation.

2.13 Transfer to effluent treatment plant

2.13.1 No transfers to effluent treatment plant are controlled under this part of this Permit. Emissions to water are controlled under 2.2.2, 2.2.3 and 2.2.5

3 Records

3.1.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:

- be made available for inspection by the Agency at any reasonable time
- be supplied to the Agency on demand and without charge
- be legible
- be made as soon as reasonably practicable
- indicate any amendments which have been made and shall include the original record wherever possible; and
- be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing.

4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out, as follows:
- in respect of the parameters and emission and monitoring points specified in Schedule 2.
 - for the reporting periods specified in Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1-2 of Schedule 4, assessed at any frequency specified therein.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of the most appropriate measures to prevent pollution, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement
- 4.1.7 The Operator shall, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under this condition, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.
- 4.1.8 The Operator shall review the monitoring results for waste characterisation, landfill gas, leachate, surface and groundwater against the relevant emission limits, assessment limits, control and trigger levels specified in the permit on a three monthly basis and shall submit a summary report of this review, to the Agency within one month of the end of each three month period.
- 4.1.9. The Operator shall review all monitoring data required by this permit on an annual basis and shall submit a summary report to the Agency within three months of the end of each year.

4.1.10 The Operator shall submit to the Agency a report setting out the types and quantities of waste disposed of at the landfill on a three monthly basis i.e. for the periods 1 April - 30 June; 1 July - 30 September; 1 October - 31 December and 1 January - 31 March, such report to be received within 1 month from the end of each period.

5 Notifications

- 5.1.1 The Operator shall notify the Agency without delay of:
- 5.1.1.1 the detection of an emission of any pollutant which exceeds any limit or criterion in this Permit specified in relation to the pollutant;
 - 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution; unless the quantity emitted is so trivial that it would be incapable of causing significant adverse environmental effect;
 - 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
 - 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution;
 - 5.1.1.5 the refusal to accept or rejection of incoming waste at the landfill, and
 - 5.1.1.6 the detection of any significant adverse environmental effects
- 5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:
- 5.1.2.1 information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
 - 5.1.2.2 the more detailed information listed in Part B or Part C of that Schedule as soon as practicable thereafter; and such information shall be in accordance with that Schedule.
- 5.1.3 The Operator shall give prior written notification to the Agency of the following events and in the specified timescales:
- 5.1.3.1 as soon as practicable prior to the permanent cessation of the landfill disposal operations,
 - 5.1.3.2 as soon as practicable prior to the cessation of the operation of the landfill disposal operations, for a period likely to exceed 1 month
 - 5.1.3.3 at least 14 days prior to the resumption of the landfill disposal operations after a cessation
- 5.1.4 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.
- 5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:
- 5.1.5.1 where the Operator is a registered company:
 - any change in the Operator's trading name, registered name or registered office address;
 - 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)
 - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
 - 5.1.5.2 where the Operator is a corporate body other than a registered company:
 - any change in the Operator's name or address;
 - any steps taken with a view to the dissolution of the Operator.
 - 5.1.5.3 In any other case:
 - the death of any of the named Operators (where the Operator consists of more than one named individual);
 - any change in the Operator's name(s) or address(es);
 - any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;

6 Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this Permit.

"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:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation onto the site, or
- groundwater quality up-gradient of the installation
- surface water quality up-gradient of the site

"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned." . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

"Characterisation" as set out in Schedule 1 para 5(5) of the of the Landfill (E&W) Regulations 2002 (SI:2002, No 1559) (as amended) and means gathering all necessary information for the safe disposal of the waste in the long term. The information required is at least that given in Schedule 1 para 5(1) and 5(2) of the 2002 Regulations. Samples of waste to be characterised must be obtained using a sampling plan in accordance with PrEN 14899 and Agency Guidance on the Sampling and Testing of Wastes to meet Waste Acceptance Procedures

"Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit"

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

"Interim Hazardous" means a landfill classified as hazardous until 16th July 2004

"L_{Aeq,T}" means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T

"L_{A90,T}" means the A weighted sound pressure level in dB exceeded for 90% of the time period, T

"L_{AFmax}" means the maximum A weighted sound level measurement in dB measured with a fast time weighting

"The Landfill Regulations" means the Landfill (England and Wales) Regulations SI 2002 No. 1559, as amended by SI 2004 No 1375 and words and expressions defined in the Landfill Regulations shall have the same meanings when used in this Permit, save to the extent that they are specifically Permit Ref AB1234

defined in this Permit. It shall include future amendments or superseding legislation

"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation" means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit. It shall include any future amendments or superseding legislation

"Range of conditions" refers to environmental conditions, such that monitoring for example, for landfill gas is undertaken at a variety of atmospheric pressures (including when it is falling), water monitoring is undertaken in low and high flow conditions and at different times of the year, etc...

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Staff" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Year" means calendar year ending 31 December.

- 6.1.2 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.
- 6.1.3 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 or Guidance for Monitoring Landfill Gas Engine Emissions
- 6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions and significant adverse environmental effects

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

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.

Part C refers specifically to the requirement to notify the Agency of any significant environmental effect as required by the Landfill Regulations and should be used instead of Part B to report such to the Agency.

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	
Location of the emission/ significant adverse environmental effect	
Time and date of the emission/ significant adverse environmental effect	

Substance[s] emitted	Media	Best estimate of the quantity or the rate of emission	time during which the emission took place
	e.g. air		
	e.g. groundwater		

Measures taken, or intended to be taken, to stop the emission	
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Part B

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 or harm 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 The County Council of the City and County of Cardiff

PART C

Nature of significant adverse environmental effect (e.g. Groundwater Pollution, LFG escape)	
Immediate measures taken to prevent further effects from this source	
Further measures taken , or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the significant adverse environmental effect	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of The County Council of the City and County of Cardiff

Schedule 2 - Reporting of monitoring data

Parameters, for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
LANDFILL GAS			
Methane (% by vol.)	Monitoring points listed in Table 2.10.11	Quarterly	From date of issue of permit
Carbon dioxide (% by vol.)	Monitoring points listed in Table 2.10.11	Quarterly	From date of issue of permit
Oxygen (% by vol.)	Monitoring points listed in Table 2.10.11	Quarterly	From date of issue of permit
Differential pressure (mbar)	Monitoring points listed in Table 2.10.11	Quarterly	From date of issue of permit
SURFACE WATER			
Volume	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Oil & Grease	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Suspended solids mg l ⁻¹	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Electrical Conductivity	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Chloride	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Ammoniacal Nitrogen	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
pH	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
COD	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
BOD	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
TON	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
Nickel	Discharge points listed in Table 2.2.5	Quarterly	From date of issue of permit
GROUNDWATER			
Water level		Quarterly	From date of issue of permit
Electrical Conductivity		Quarterly	From date of issue of permit
Chloride		Quarterly	From date of issue of permit
Ammoniacal Nitrogen		Quarterly	From date of issue of permit
Mercury		Quarterly	From date of issue of permit
pH		Quarterly	From date of issue of permit
Total Alkalinity (CaCO ₃)		Quarterly	From date of issue of permit
Magnesium		Quarterly	From date of issue of permit
Potassium		Quarterly	From date of issue of permit
Zinc		Quarterly	From date of issue of permit
Copper		Quarterly	From date of issue of permit
Cadmium		Quarterly	From date of issue of permit
Iron		Quarterly	From date of issue of permit
Chromium		Quarterly	From date of issue of permit
Total sulphates		Quarterly	From date of issue of permit

Calcium	Quarterly	From date of issue of permit
Manganese	Quarterly	From date of issue of permit
Sodium	Quarterly	From date of issue of permit
TOC	Quarterly	From date of issue of permit
TON	Quarterly	From date of issue of permit
Lead	Quarterly	From date of issue of permit
Ethyl-benzene	Quarterly	From date of issue of permit
Xylene	Quarterly	From date of issue of permit
Mecoprop	Quarterly	From date of issue of permit
Nickel	Quarterly	From date of issue of permit
List I Suite	Annual	From date of issue of permit
Monitoring point base	Annual	From date of issue of permit

LEACHATE

Leachate level	Monitoring points listed in Table 2.10.12	Quarterly	From date of issue of permit
Quantity	Quantity discharged to sewer (m3)	Quarterly	From date of issue of permit
Chloride		Quarterly	From date of issue of permit
Ammoniacal Nitrogen		Quarterly	From date of issue of permit
Cadmium		Quarterly	From date of issue of permit
Nickel		Quarterly	From date of issue of permit
Xylene		Quarterly	From date of issue of permit
Mecoprop		Quarterly	From date of issue of permit

Annually

Calculation of remaining capacity in cubic metres accounting for settlement
Record of the structure and composition of the landfill body
Surveying of the settling behaviour of the landfill during the operating and after care phases
Volume and composition of waste deposited in the previous 12 months

Quarterly

Quantity of waste deposited

Monthly

Leachate levels as mAOD
Basal elevation as mAOD
Waste volume

1. Stable, permanent survey control stations shall be established and maintained for the control of all survey work around the site. The stations shall be referenced to Ordnance Survey National Grid co-ordinates, the grid alignment to be within +/-1 metre and levels referenced to Ordnance Datum. The accuracy of horizontal control shall not be less than 1:20 000. The level values of adjacent stations shall agree to less than or equal to 0.05 metres. No waste shall be accepted at the site until a schedule of descriptions, co-ordinates and level values of all control stations, together with details of Bench Marks used, has been submitted in writing to the Agency.
2. A topographic survey shall be carried out immediately before the start of filling of each phase or cell, at annual intervals (unless otherwise agreed in writing by the Agency), and at the completion of restoration. The scale shall adequately show surveyed features and be at least 1:1250. The surveys shall be sufficient to produce plans that include all roads, structures, boundaries, monitoring points and all other relevant site features. The results of the survey shall be presented as a plan, including the immediate neighbouring landform or an indication of that landform. Plan positions of ground features to be shown to within 1 metre. Spot levels to 0.05m shall be shown at significant landform changes to a density to adequately indicate the true landform, no greater than 50 metre interval in open areas of even gradient, closer when indicating embankments, stockpiles, etc.

Schedule 3 - Forms to be used

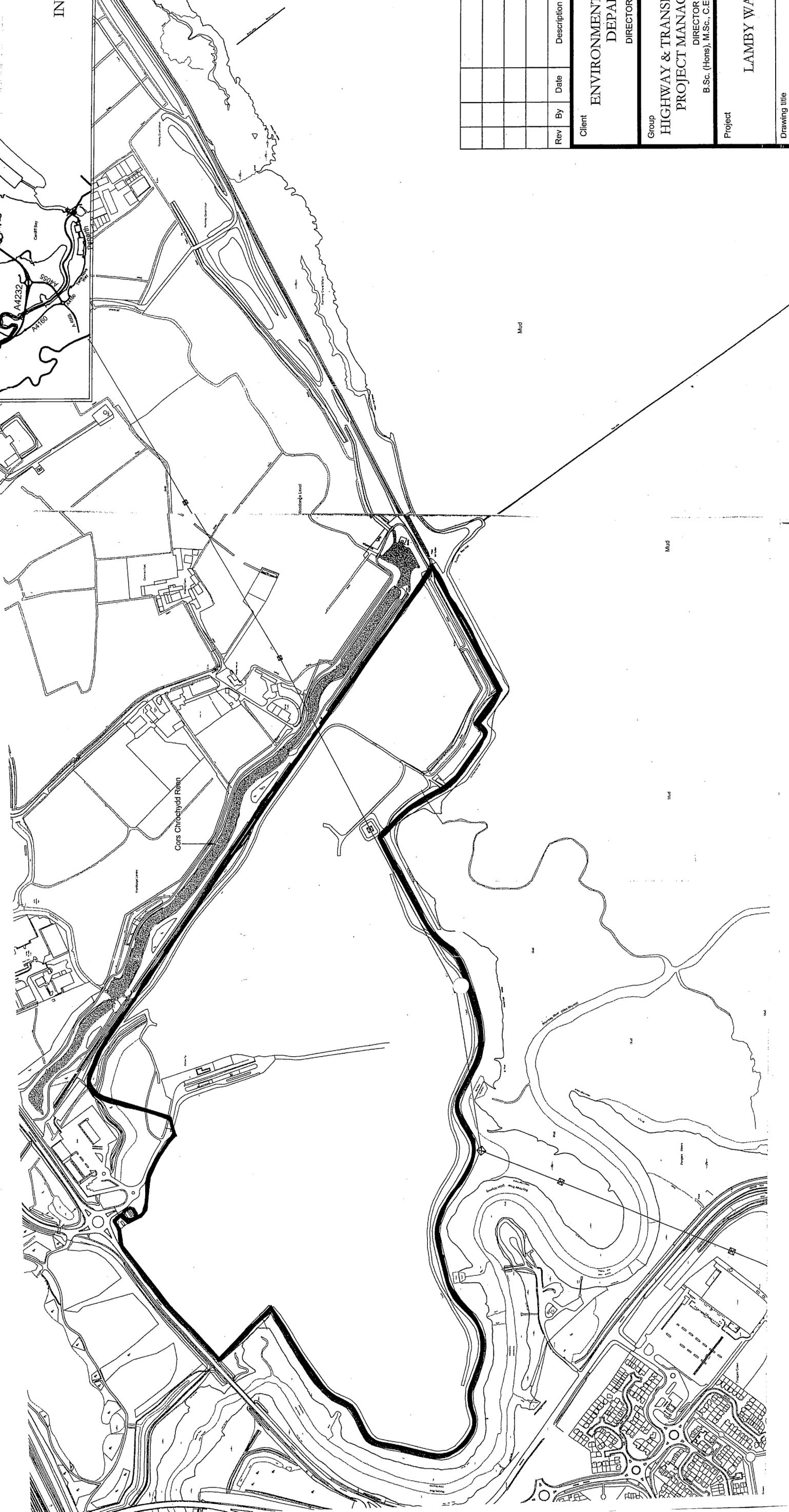
Table S3: Reporting Forms		
Media/parameter	Form Number	Date of Form
Surface Water	None Provided. Reporting format to be agreed in writing with the Agency	
Groundwater	None Provided. Reporting format to be agreed in writing with the Agency.	
Landfill Gas	None Provided. Reporting format to be agreed in writing with the Agency.	
Waste/Raw Material Return	WPPCS1	
Waste Summary	None provided. Reporting format to be agreed in writing with the Agency.	
Landfill Body	None provided. Reporting format to be agreed in writing with the Agency.	

Schedule 4 - Reporting of performance data

Table S4.1: Annual Production/Treatment	
Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Tonnes/year
Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	
Landfill gas: Disposed of by flare; Burnt in gas engine; Utilised by brickworks.	

Table S4.2: Performance parameters			
	Frequency of assessment	Annual average	
Potable water use	Annually		Cu m/tonne of waste disposed
Energy used	Annually		MW of electricity/tonne of biodegradable waste disposed
Non potable water use	Annually		Cu m/tonne of waste disposed
Energy generated	Annually		MW of electricity/tonne of biodegradable waste disposed
Waste Hazard Score (from H1)	Annually		
Waste Disposal Score (from H1)	Annually		

INSET LOCATION PLAN
Scale 1/50000



KEY

Proposed PPC
Boundary

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Rev	By	Date	Description of Amendment	Chk. By	Date

Client ENVIRONMENTAL PROTECTION DEPARTMENT DIRECTOR : M.W. EVANS	
Group HIGHWAY & TRANSPORTATION SERVICES PROJECT MANAGEMENT DIVISION DIRECTOR : John M. Dacey, B.Sc. (Hons), M.Sc., C.Eng., F.I.C.E., F.I.H.T., M.I.Mgt.	
Project LAMBY WAY LANDFILL	
Drawing title PPC INSTALLATION BOUNDARY THE SITE PLAN	
Scale 1/5000	Date APRIL 2005
Drawing No. SEW 239.LWEE.14	
Drawn by MLW	Rev.

Schedule 5 - Site Plan

SEW 239.LWEE.14 dated April 2005

Schedule 6 - List of Permitted Wastes

EWC Code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 10	dusty and powdery wastes other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (inc spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing;
02 03 02	wastes from preserving agents
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)

EWC Code	Description
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES
04 01	wastes from the leather and fur industry
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
05	WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL
05 01	wastes from petroleum refining
05 01 14	wastes from cooling columns
05 06	wastes from the pyrolytic treatment of coal
05 06 04	waste from cooling columns
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 09	wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	wastes from the manufacture of inorganic pigments and opacifiers
06 11 01	calcium-based reaction wastes from titanium dioxide production
07	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 13	waste plastic
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 05	wastes from the MFSU of pharmaceuticals
07 05 14	solid wastes other than those mentioned in 07 05 13
08	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01	wastes from MFSU and removal of paint and varnish
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17

EWC Code	Description
08 02	wastes from MFSU of other coatings (including ceramic materials)
08 02 01	waste coating powders
08 03	wastes from MFSU of printing inks
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 03 19*	disperse oil
08 04	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01	wastes from the photographic industry
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 24	sands from fluidised beds
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 04	other particulates and dust
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 04	other particulates and dust
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust

EWC Code	Description
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO METALLURGY
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 12	brake pads other than those mentioned in 16 01 11
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	Plastic
16 01 20	Glass
16 01 22	components not otherwise specified
16 03	off-specification batches and unused products
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
16 05	gases in pressure containers and discarded chemicals
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
16 11	waste linings and refractories
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics

EWC Code	Description
10 08	wastes from other non-ferrous thermal metallurgy
10 08 04	particulates and dust
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 09*	flue-gas dust containing dangerous substances
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 11*	other particulates containing dangerous substances
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15*	waste crack-indicating agent containing dangerous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 14	glass-polishing and grinding sludge other than those mentioned in 10 11 13
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge

EWC Code	Description
17 01 01	Concrete
17 01 02	Bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	Aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	iron and steel
17 04 06	Tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	insulation materials and asbestos-containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 07	chemicals other than those mentioned in 18 01 06
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 06	chemicals other than those mentioned in 18 02 05
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 02	wastes from physico/chemical treatments of waste (including dechromation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 08*	liquid combustible wastes containing dangerous substances

EWC Code	Description
19 03	stabilised/solidified wastes
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	vitrified waste and wastes from vitrification
19 04 01	vitrified waste
19 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 06	wastes from anaerobic treatment of waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 07	landfill leachate
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	wastes from waste water treatment plants not otherwise specified
19 08 01	Screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	solid waste from primary filtration and screenings
19 09 04	spent activated carbon
19 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	Glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	Textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	Glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	Clothes
20 01 11	Textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

EWC Code	Description
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 01 40	Metals
20 01 41	wastes from chimney sweeping
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 06	waste from sewage cleaning
20 03 07	bulky waste

END OF PERMIT