

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Landfill Management Limited

Amberswood Leachate Treatment Plant
Manchester Road
Hindley
Wigan
Lancashire
WN2 3DA

Variation application number

EPR/PP3532MB/V002

Permit number

EPR/PP3532MB

Amberswood Leachate Treatment Plant

Permit number EPR/PP3532MB

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

Schedule 1 to the Environmental Permitting Regulations has been updated by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 to reflect the implementation of the Industrial Emissions Directive into England and Wales. This variation implements the changes made to Schedule 1 of the Regulations into Table S1.1 of the permit. Table S1.1 specifies the activities authorised by the permit.

The schedules to this variation specify the changes made to the original permit.

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

Status log of the permit		
Description	Date	Comments
Application PP3532MB	18/12/06	
Schedule 4 Notice	29/06/07	Response dated 27/07/07
Permit determined	17/09/07	
Agency variation determined EPR/PP3532MB/V002	22/01/14	Agency variation to implement the changes introduced by IED

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

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

Permit number
EPR/PP3532MB

issued to:
Landfill Management Limited (“the operator”)

whose registered office is

Ground Floor West
900 Pavilion Drive
Northampton Business Park
Northampton
NN4 7RG

company registration number **02069821**

to operate a regulated facility at

Amberswood Leachate Treatment Plant
Manchester Road
Hindley
Wigan
Lancashire
WN2 3DA

to the extent set out in the schedules.

The notice shall take effect from 22/01/2014

Name	Date
Damien Matthias	22/01/2014

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as detailed, following an Environment Agency initiated variation

- Table S1.1 is amended to reflect the changes to Schedule 1 of the Environmental Permitting Regulations introduced by the Industrial Emissions Directive. The table now reads:

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
S5.4 A(1)(a)(ii)	Treatment and disposal of landfill leachate using methane stripping (D9).	From the reception of non-hazardous landfill leachate to disposal to sewer. Waste types to be as specified in Schedule 3 tables S3.2.
Directly Associated Activity		
Leachate and surface run-off storage	Storage of leachate and surface run-off.	Limited to leachate and run-off generated from the Amberswood landfill site.

Schedule 3 – conditions to be added

None



**ENVIRONMENT
AGENCY**

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Amberswood Leachate Treatment
Plant

Landfill Management Ltd
Manchester Road
Hindley
Wigan
Lancashire
WN2 3DA

Permit number
PP3532MB

Amberswood Leachate Treatment Plant Permit Number PP3532MB

Introductory note

This introductory note does not form a part of the permit

The main features of the installation are as follows.

The installation site is located approximately 3km south-west of Wigan town centre, adjacent to the Amberswood landfill site. The installation covers an area of approximately 300m², centred on national grid reference SD608047

The installation treats non-hazardous leachate from the Amberswood Landfill site by a methane stripping process. Landfill leachate contains dissolved methane, and the purpose of the process is to remove methane from the leachate, so that the leachate can be safely discharged to public sewer.

Leachate is pumped from the landfill site into the first of a series of three 2000 litre capacity aeration tanks on the installation. Methane gas is removed from the leachate by the passage of air bubbles introduced into the tanks by an aeration unit. The leachate flows from one tank to the next in series, allowing sufficient residence time for the methane to be stripped from the leachate. The treated leachate is then pumped via a pipe to the public sewer. The installation has the capacity to treat up to 150 tonnes of non-hazardous leachate a day, up to a maximum of 55,000 tonnes a year.

The leachate treatment plant is located on a concrete hardstanding within a secure compound. The three aeration tanks are within a self-bunded steel container. The aeration unit and pumps are located in a separate ISO unit. No raw materials are stored at the site. Waste produced by the installation is limited to sludge which forms in the treatment tanks; this is removed and disposed of to a licensed waste disposal facility.

The installation releases emissions to air and to sewer. There are no releases to water or to land. Releases to air arise from the treatment tanks and consist of the sparged air with entrained methane and water vapour and droplets. The concentrations of methane emitted are low and the Agency does not regard them as likely to cause significant environmental impact. Releases to sewer consist of treated leachate; the leachate is then treated by Wigan waste water treatment works before discharge to the River Douglas.

The Operator has demonstrated that they have an appropriate management system in place to ensure the satisfactory performance of the installation.

There are no European Habitats within 10 km of the proposed installation. There is a SSSI (Bryn Marsh and Ince Moss) whose closest point is approximately 1.9 km to the south-west of the installation. The Environment Agency has assessed that the installation is not likely to have a significant impact on this site.

The following Permit is issued under 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 an installation carrying out activities covered by the description in Section 5.3 Part A (1) c) (ii) "Disposal of non-hazardous waste more than 50 tonnes per day by physico-chemical treatment" in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by this Permit.

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

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 relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

Status Log of the permit		
Detail	Date	Response Date
Application PP3532MB	18/12/06	
Schedule 4 Notice	Request dated 29/06/07	Response dated 27/07/07
Permit determined	17 th September 2007	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation			
Holder	Reference Number	Date of Issue	Fully or Partially Superseded
Landfill Management Limited	00432 (EAWML53648)	15/05/1986	Partially superseded. The parts of the waste management licence related to the leachate treatment plant only are superseded.

The waste management licence shall cease to have effect if and to the extent that treatment, keeping or disposal of waste authorised by the licence is authorised by this permit.

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	Reference Number	Date of Issue
Landfill Management Limited	00432 (EAWML53648)	15/05/1986

End of Introductory Note

Permit

Pollution Prevention and Control
(England and Wales) Regulations 2000

Permit

Permit number

PP3532MB

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) hereby authorises

Landfill Management Limited ("the operator"),

whose registered office is

**Ground Floor West
900 Pavilion Drive
Northampton Business Park
Northampton
Northamptonshire
NN4 7RG**

company registration number **2069821**


to operate an installation at

**Amberswood Leachate Treatment Plant
Manchester Road
Hindley
Wigan
Lancashire
WN2 3DA**

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

Signed

Date

	17 th September 2007
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J M Ingram

Authorised to sign on behalf of the Agency

Conditions

1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

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

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.2 Accidents that may cause pollution

1.2.1 The operator shall:

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

1.3 Energy efficiency

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures by a review.

1.4 Efficient use of raw materials

1.4.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every 4 years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

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

1.5 Avoidance, recovery and disposal of wastes produced by the activities

1.5.1. The operator shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every 4 years whether changes to those measures should be made; and
- (c) take any further appropriate measures identified by a review.

1.6 Site security

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

2. Operations

2.1 Permitted activities

2.1.1 The operator is authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

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

2.3 Operating techniques

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

2.3.2 No raw materials or fuels listed in schedule 3 table S3.1 shall be used unless they comply with the specifications set out in that table.

2.3.3 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 3 table S3.2; and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.4 Records shall be kept of all waste accepted onto the site.

2.4 Off-site conditions

There are no off-site conditions under this section.

2.5 Improvement programme

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

2.6 Pre-operational conditions

There are no pre-operational conditions in this permit.

2.7 Closure and decommissioning

- 2.7.1 The operator shall maintain and operate the activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.
- 2.7.2 The operator shall maintain a site closure plan which demonstrates how the activities can be decommissioned to avoid any pollution risk and return the site to a satisfactory state.
- 2.7.3 The operator shall carry out and record a review of the site closure plan at least every 4 years.
- 2.7.4 The site closure plan (or relevant part thereof) shall be implemented on final cessation or decommissioning of the activities or part thereof.

2.8 Site protection and monitoring programme

- 2.8.1 The operator shall, within 2 months of the issue of this permit, submit a site protection and monitoring programme.
- 2.8.2 The operator shall implement and maintain the site protection and monitoring programme and shall carry out and record a review of it at least every 4 years.

3. Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 4 tables S4.1, S4.2 and S4.3.
- 3.1.2 The limits given in schedule 4 shall not be exceeded.

3.2 Transfers off-site

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

3.3 Fugitive emissions of substances

- 3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.3.2 All liquids, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.4 Odour

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

3.5 Noise and vibration

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

3.6 Monitoring

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake monitoring for the parameters, at the locations and at not less than the frequencies specified in the following tables in schedule 4 to this permit:
- (a) point source emissions specified in tables S4.1, S4.2 and S4.3;
- 3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.
- 3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 4 tables S4.1, S4.2 and S4.3 unless otherwise specified in that schedule.

4. Information

4.1 Records

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

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) the site protection and monitoring programme.

4.1.2 Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.

4.2 Reporting

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

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the assessment of the impact of the emissions submitted with the application;
- (b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;
- (c) the annual production /treatment data set out in schedule 5 table S5.2;
- (d) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule; and
- (e) details of any contamination or decontamination of the site which has occurred.

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

- (a) in respect of the parameters and emission points specified in schedule 5 table S5.1;
- (b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

- 4.2.3 A summary report of the waste types and quantities accepted and removed from the site shall be made for each quarter. It shall be submitted to the Agency within one month of the end of the quarter and shall be in the format required by the Agency.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency
- 4.2.6 The results of reviews and any changes made to the site protection and monitoring programme shall be reported to the Agency, within 1 month of the review or change.

4.3 Notifications

- 4.3.1 The Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit;
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.
- 4.3.3 Prior written notification shall be given to the Agency of the following events and in the specified timescales:
- (a) as soon as practicable prior to the permanent cessation of any of the activities;
 - (b) cessation of operation of part or all of the activities for a period likely to exceed 1 year; and
 - (c) resumption of the operation of part or all of the activities after a cessation notified under (b) above.
- 4.3.4 The Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.5 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling; the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.6 The Agency shall be notified within 7 days of any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence.
- 4.3.7 The Agency shall be provided, within 14 days of the operator or any relevant person being convicted of a relevant offence, (unless such information has already been notified to the Agency), with details of the nature of the offence, the place and date of conviction, and the sentence imposed.

- 4.3.8 The Agency shall be notified within 14 days of the operator and/or any relevant person lodging an appeal against a conviction for any relevant offence and of the outcome when the appeal is decided.
- 4.3.9 The Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- (a) any change in the operator's trading name, registered name or registered office address;
 - (b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
 - (c) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

4.4 Interpretation

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

Schedule 1 - Operations

Table S1.1 activities

Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity and WFD Annex IIA and IIB operations	Limits of specified activity and waste types
S5.3 A1 (c)(ii)	Treatment and disposal of landfill leachate using methane stripping (D9)	From the reception of non-hazardous landfill leachate to disposal to sewer. Waste types to be as specified in Schedule 3 tables S3.2.
Directly Associated Activity		
Directly Associated Activity	Storage of leachate and surface run-off	Limited to leachate and run-off generated from the Amberswood landfill site

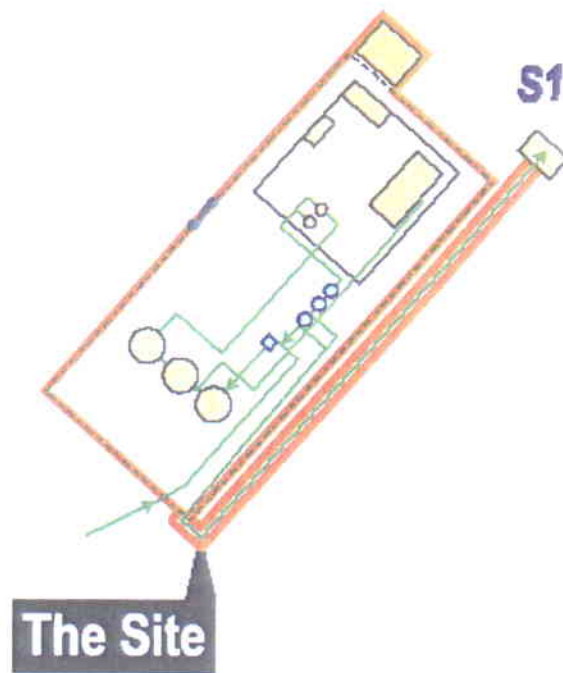
Table S1.2 Operating techniques

Description	Parts	Date Received
Application	Sections B2.1 and B2.2 and Appendix 3 "Process Description and Pollution Control" of the application	29/11/06
Schedule 4 Notice response	Parts 2) and 3)	Response dated 27/07/07

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	The Operator shall review the adequacy of secondary containment around all leachate treatment tanks and identify improvements required, having regard to the Agency Sector Guidance Note IPPC S5.03 Technical Guidance for the Treatment of Landfill Leachate, February 2007. The Operator shall submit a written report to the Environment Agency, identifying the existing secondary containment and identified improvements and a timetable for carrying out the identified improvements.	17 th June 2008
IC2	The operator shall provide and maintain monitoring of effluent flow to sewer to the MCERTS standard. A copy of the first MCERTS site conformity inspection certificate shall be submitted to the Environment Agency.	17 th September 2008
IC3	The Operator shall carry out an assessment of the volume of methane released to air from the installation over a 12 month period. The volume shall be calculated on the basis of methane removal from the leachate. The assessment shall also include consideration of how the volume of methane released to air will vary as the quality and volume of leachate changes over time. The Operator shall prepare and submit a written report on the assessment.	17 th March 2009
IC4	The Operator shall submit an environmental impact assessment which evaluates the potential for impact arising from the release from the installation of ammonia (unionised) (as N) to sewer. The assessment shall use the Agency's H1 tool (or other equivalent assessment tool used with the written agreement of the Agency), using actual data for unionised ammonia. An electronic copy of the H1 assessment (or other equivalent assessment tool used with the written agreement of the Agency) shall be submitted to the Agency.	17 th September 2008
IC5	The Operator shall develop a written site closure plan, having regard to the Agency Sector Guidance Note IPPC S5.03 Technical Guidance for the Treatment of Landfill Leachate, February 2007. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.	17 th September 2008

Schedule 2 - Site plan



Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Raw materials and fuels

Raw materials and fuel description	Specification
-	-

Table S3.2 Permitted waste types and quantities for treatment of non-hazardous landfill leachate

Maximum quantity	55,000 tonnes per year
Waste code	Description
19 07 03	Non-hazardous landfill leachate

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [vent from leachate tank 1]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required
A2 [vent from leachate tank 2]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required
A3 [vent from leachate tank 3]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required

Table S4.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
None	--	--	--	--	--	--

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on drawing reference ASR4 (dated 30.10.06)	Flow	Amberswood landfill site effluent treatment plant	No limit set	24 hours	Monthly	In accordance with M18 methodology unless otherwise agreed in writing by the Agency.

Schedule 5 - Reporting

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

Table S5.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to sewer Parameters as required by condition 3.6.1	S1 on drawing reference ASR4 (dated 30.10.06)	Every 3 months	17 th September 2007

Table S5.2: Annual treatment

Parameter	Units
Non-hazardous landfill leachate.	tonnes

Table S5.3 Performance parameters

Parameter	Frequency of assessment	Units
Energy used per tonne of leachate treated	Annually	MW/tonne

Table S5.4 Reporting forms

Media/parameter	Reporting format	Date of form
Sewer	Form sewer 1 or other form as agreed in writing by the Agency	17 th September 2007
Energy usage	Form energy 1 or other form as agreed in writing by the Agency	17 th September 2007
Other performance indicators	Form performance 1 or other form as agreed in writing by the Agency	17 th September 2007

Schedule 6 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

Permit Number	PP3532MB
Name of operator	Landfill Management Ltd
Location of Installation	Manchester Road Hindley Wigan Lancashire WN2 3DA
Time and date of the detection	

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

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

be taken, to stop the emission	
--------------------------------	--

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

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

Part B - to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Landfill Management Ltd

Schedule 7 - Interpretation

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

"*accident management plan*" means a documented procedure (or procedures) that set out the measures necessary to prevent accidents occurring within the permitted installation, during both normal and abnormal operations, and limit the consequences to human health or the environment of any such accidents that do occur.

"*annually*" means once every year.

"*application*" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 4 to the PPC Regulations.

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

"*disposal*" shall mean any of the operations provided for in Annex IIA to Directive 75/442/EEC.
"*emissions to land*", includes emissions to groundwater.

"*fugitive emission*" means an emission to air, water or land from the activities which is not controlled by an emission or background concentration limit.

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

"*land protection guidance*", means Agency guidance "H7 - Guidance on the protection of land under the PPC Regime: application site report and site protection monitoring programme".

"*MCERTS*" means the Environment Agency's Monitoring Certification Scheme.

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

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

"*quarter*" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.
"*recovery*" shall mean any of the operations provided for in Annex IIB to Directive 75/442/EEC.

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

"*site protection and monitoring programme*" means a document which meets the requirements for site protection and monitoring programmes described in the Land Protection Guidance.

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

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

"WFD" means Waste Framework Directive (75/442/EEC).

"year" means calendar year ending 31 December.

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

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

END OF PERMIT

Determination of an Application for a PPC Permit under the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973)

Decision document recording the decision-making process

Note: all references to the “PPC Regulations” are to the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973), as amended.

Administrative details

Duly made application date	18/12/06
Permit number (the “Permit”)	PP3532MB
Applicant (the “Applicant”)	Landfill Management Limited
Address/location of installation (the “Installation”)	Amberswood Leachate Treatment Plant Manchester Road Hindley Wigan Lancashire WN2 3DA
Name of Authorising Officer	Julian Ingram PIR Permitting Team Leader Warrington Strategic Permitting Group

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INTRODUCTION

Purpose of this document

The decision document explains how the applicant's application has been determined and why the specific conditions in the permit have been imposed. It is a record of the decision-making process to show how all relevant factors have been taken into account.

The permit contains many conditions taken from our standard non-landfill PPC permit template (version 3). We developed these conditions in consultation with industry having regard to the legal requirements of the PPC regulations and other relevant legislation. This decision document does not include an explanation for these standard conditions. Where they are imposed we have considered the application and accepted the details are sufficient and satisfactory to control that aspect of the operation. This decision document does, however, provide an explanation for the use of alternate conditions where our permit template allows for two or more options. Emission and monitoring compliance levels and any additional conditions that have been imposed in order to take installation-specific factors into account are explained.

The permit also contains conditions that are specific to the waste treatment sector. The reasons for these conditions, and their regulatory basis, are contained in Annex 3.

Summary of the decision

We have decided to grant a permit for the operator, subject to the conditions in the permit. Where the permit includes standard conditions (see above), these have been considered to be appropriate for the installation, in particular in ensuring that all appropriate measures will be taken against pollution and that no significant pollution will be caused. We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that all appropriate measures will be taken against pollution and that no significant pollution will be caused.

PART A – GENERAL ISSUES

A1 Administration

This section includes administrative information relating to the application and information about the applicant and the installation.

The application was duly made on 18/12/06.

The operator has made a claim for commercial confidentiality. We have accepted the claim for commercial confidentiality, considering that the inclusion of the relevant information on the public register would prejudice the applicant's commercial interests to an unreasonable degree for the reasons given in the notice of determination.

The application was advertised and consulted in accordance with the regulations. Details of the advertising and consultation are on the public register. Any responses received are summarised in Annex 1. We have taken these into consideration as described in Annex 1 when determining the application.

The requirements of PPD do not apply to this application.

A2 Description of the installation

A brief description of the installation is in the introductory note to the permit.

A3 Operator competence

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the installation after the grant of the permit. We are satisfied that they will be able to operate the installation so as to comply with the conditions we have included in the permit.

Throughout the application the Operator has demonstrated they understand the environmental issues of the Installation and that they have effective controls in place and the resources to ensure they are implemented. All relevant personnel have the appropriate level of certification to demonstrate that the Permit holder is a "fit and proper person" in relation to the specified waste management activities.

Management procedures are in place and the site is operated under a Waste Management Licence. The Agency is not aware of any regulatory concerns with regard to this authorisation, and the Statutory Consultees did not raise any compliance issues in their consultation responses.

A4 Requirements for SWMAs

The operator has replied to application question B7.1 stating that the installation does contain an SWMA and we agree with this assessment.

The operator has replied to application question B7.2 confirming that planning permission for the proposed SWMA is in force and we are satisfied with this information. Appendix 9 of the Application contains planning permission from Wigan Council, Application No. A/03/57955 MIN dated 24/02/2003.

The Applicant has been able to demonstrate that it is a Fit and Proper Person to carry out the specified waste management activities that are part of the permitted activities at the installation.

The considerations taken into account were:

Technical Competence – The operator has provided evidence that technically competent management (LTP Compliance Manager) is available for the installation through provision of relevant WAMITAB certificates at level 4 in Waste Management Operations – Managing Landfill Hazardous Waste (4LH), - Managing Treatment Hazardous Waste (4TMH), - Managing Treatment Non-Hazardous Waste (4TMNH).

Relevant Offences – We are satisfied that no relevant offences apply to this site. It was noted that Waste Recycling Group Ltd and its subsidiaries hold several convictions, although none relate to Landfill Management Limited, and most convictions relate to the operation of sites either before or soon after their acquisition by WRG. One conviction relates to the escape of leachate from a 3C Waste Ltd site near Warrington in 2000/2001: the operator notes that the offences occurred prior to WRG Ltd operating the site, and the situation had been addressed to the Agency's satisfaction through the installation of a leachate treatment plant and other improvements.

Financial Provision – We are satisfied that the operator has made suitable financial provision obligations under the permit.

A5 EPOPRA profile

We are satisfied that the EPOPRA profile submitted with the application remains accurate following the determination of the application.

The EPOPRA score of 59 will be used as the basis for subsistence and other charging. In accordance with our EPOPRA Scheme however, the operator's EPOPRA profile for the installation may change over time.

PART B: THE INSTALLATION AND ITS MANAGEMENT

B1 General Management

Permit condition 1.1

Based upon the information submitted in the application, we are satisfied that appropriate management systems and management structures are in place for this installation and that sufficient financial, technical and manpower resources are available to the operator to ensure compliance with all the permit conditions.

B2 Accidents that may cause pollution

Permit Condition 1.2

Based upon the information submitted in the application, we are satisfied that appropriate measures are in place to ensure that accidents that may cause pollution are minimised.

B3 Energy efficiency

Permit condition 1.3

Based upon the information submitted in the application, we are satisfied that appropriate measures are in place to ensure that energy is used efficiently.

The operator is required to report with respect to energy usage under condition 4.2.1/2 and Schedule 5. The Operator is required to report energy use against the volume of leachate treated in order to provide an indication of the efficiency of the process. The energy is used to power the aerator and pumps.

B4 Efficient use of raw materials

Permit condition 1.4

Based upon the information submitted in the application we are satisfied that the appropriate measures are in place to ensure the efficient use of raw materials and water.

B5 Avoidance, recovery and disposal of wastes produced by the activities

Permit condition 1.5

Based on the information submitted in the application we are satisfied that the appropriate measures are in place such that waste production will be avoided as far as possible, and where waste is produced it will be recovered unless technically and economically impossible. We are satisfied that the operator's justification for their proposed waste disposal option shows that such waste that does arise from the installation that can not be recovered will be disposed of using a disposal method that avoids or reduces any impact on the environment.

B6 Site Security

[Permit condition 1.6](#)

Based upon the information submitted in the application, we are satisfied that appropriate infrastructure and procedures are in place to ensure that site remains secure.

B7 Multiple operator installations

[Permit condition 1.7](#)

This is not a multi-operator installation.

B8 The permitted activities

[Permit condition 2.1](#)

We have determined that the installation comprises the following activities listed in Part 1 of Schedule 1 to the PPC Regulations and the following directly associated activities.

- Section 5.3 Part A (1) c) (ii) Disposal of non-hazardous waste more than 50 tonnes per day by physico-chemical treatment.

And the following directly associated activity,

- Storage of leachate and surface run-off.

The activities comprise a single installation because they are successive steps in one integrated industrial activity.

B9 The site

[Permit condition 2.2](#)

The operator has provided a plan which we consider is satisfactory, showing the site of the installation and its extent. A plan is included in the permit at Schedule 2, and the operator is required to carry on the permitted activities within the site boundary.

Part C: Operations and releases

C1 Operating techniques

[Permit condition 2.3/table S1.2](#)

We have specified that the applicant must operate his installation in accordance with the following descriptions in his application:

Description	Parts Omitted	Justification
Sections B2.1 and B2.2 and Appendix 3 "Process Description and Pollution Control" of the application	None	Details of in-process controls are provided

[Permit condition 2.3/Table S3.1](#)

We have not specified any limits and controls on the use of raw materials and fuels.

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the installation in tables S3.2. The installation only accepts landfill leachate. We are satisfied that the operator can accept these wastes as Landfill Management Ltd has adequate provision for treatment of the volume of leachate that arises from the landfill.

C2 Off-site conditions

[Permit condition 2.4](#)

Based on the information submitted in the application, we consider that it is not necessary to impose any off-site conditions.

C3 Improvement Conditions

[Permit condition 2.5](#)

Based in the information in the application we consider that we need to set improvement conditions. These are listed in annex 2- justifications for these are provided at the relevant section of the decision document.

C4 Pre-operation conditions

[Permit condition 2.6](#)

Based on the information on the application, we consider that we do not need to impose any pre-operational conditions.

C5 Closure and decommissioning

[Permit condition 2.7](#)

Based upon the information submitted in the application we are not fully satisfied that the appropriate measures are in place for the closure and decommissioning of the installation.

The Operator does not have a site closure plan, so improvement condition IC6 has been set. This requires the Operator to develop a written Site Closure Plan, having regard to the requirements set out in Section 2.11 of the draft Agency Guidance Note IPPC S5.03, and to submit this in writing to the Agency.

C6 Site protection and monitoring programme

[Permit condition 2.8](#)

The applicant has provided a site report the main elements of which are:

Site Environmental setting and Pollution History

The installation site is located approximately 3km south-west of Wigan town centre, on an area adjacent to the now-closed Amberswood landfill site. The installation covers an area of approximately 300m², centred on national grid reference SD608047 at an altitude of 140m AOD.

To the north of the site is a railway line and open countryside, and Amberswood Common lies to the west and south. Immediately to the south-west is the closed and restored Amberswood Landfill Site. The nearest domestic properties are 150m to the east of the site, beyond some recreation land; these properties are the start of the town of Hindley, whose centre lies 1.5 km to the east of the site.

There are no European Habitats sites within 10 km of the installation. There is a SSSI (Bryn Marsh and Ince Moss) whose nearest edge is approximately 1.9 km to the south-west of the installation.

The ASR indicates that the site is underlain by an unknown depth of made ground; below this lie Carboniferous Westphalian coal measures, which are, in turn, underlain by millstone grit at 600m depth. The geology is classed as a minor aquifer. The site is not situated within a source protection zone. There are no groundwater water abstractions within 1km of the installation.

There are no surface waters on the installation. The nearest water bodies are a lagoon 670m to the south, a pond 1,200m to the south-west and a small pond 350m north-west of the installation.

The ASR reports that the installation is in an area that was used as a former civic amenity site and weighbridge area associated with the Amberswood landfill site. It is reported that the installation site is likely to be underlain by waste deposits from historic landfilling operations. The landfill site first appears on maps in the 1980s, before that the installation site was agricultural land.

Section 3.4 of the ASR states that 'there were no pollution incidents detailed within the Envirocheck Site Sensitivity Report as having originated on the installation site', and Wigan MBC confirmed that no known pollution incidents have occurred at the site. However, 16 reported pollution incidents to controlled waters and 3 prosecutions for unauthorised processes within 1km of the site are reported.

Polluting substances and Prevention Measures

The operator has identified untreated and treated leachate as potentially polluting substances at the site. No raw materials are stored on site.

All pipes on the installation are HDPE and are above ground with the exception of the pipe taking treated leachate to sewer which goes underground outside the palisade fence. The three 2000 litre leachate treatment tanks are made of HDPE and are located within an ISO container. The adequacy of the bunding this provides is not clear, although the application states that the structure provides containment. IC1 has been set requiring the Operator to review the adequacy of the bunding. The aerator unit and pumps are contained within another ISO container.

The pipework and ISO containers are on an area of concrete hardstanding that is reported to be intact. The installation is surrounded by a metal palisade fence and the gate is kept locked. There are no underground storage tanks reported on site.

The operator has stated that the pipes and tanks are inspected regularly, although the frequency of these inspections was not specified. The SPMP will require the operator

to establish an inspection and maintenance system for the pipework, tanks, containment and concrete hardstanding.

Conceptual Site Model

A conceptual site model has been detailed in Section 6 of the ASR. The model, together with information previously given in the ASR, includes the major potential sources of potential pollution and the means by which pollution may take place. The operator has identified leachate and treated leachate as potential polluting substances.

Since the major sources of pollution have been indicated in the ASR no further action is required by the applicant other than to review procedures associated with the prevention of fugitive releases to ground according to the conditions of the SPMP, and to address the review of containment required by improvement condition IP1.

Determination

We consider that the ASR provides sufficient information concerning the condition of the site and the potential for pollution present in on or under the land that may constitute a pollution risk. From the information provided it is possible that there are areas of the site which may be polluted as a result of the previous activities. However, since we agree with the Operator's assessment of little likelihood of pollution, we do not consider it necessary to collect reference data in order to ascertain the extent of pollution that may be present.

To ensure the continued effectiveness of pollution prevention measures to protect the land we are requiring the operator to implement and operate a Site Protection and Monitoring Programme, the design of which must be reported to the Agency within two months from the date of permit issue.

C7 Emissions to water, air or land.

[Permit condition 3.1](#)

We have reviewed the techniques used by the operator and compared these with the relevant guidance note - Technical Guidance for the Treatment of Landfill Leachate, IPPC S5.03, February 2007.

We have assessed the operator's BAT proposals as set out in sections B2.1 and B2.2 as well as supporting documentation (Appendix 3 "Process Description and Pollution Control) of the application and compared them against the indicative standards applying to this sector as described in the TGN. We have also reviewed the Operator's assessment of the environmental impact of emissions from the installation; a commentary on the assessment is given below. The potential environmental impact of the releases to sewer has been determined using the methodology provided in H1.

Emissions to Air

Emissions to air arise from leachate treatment tank venting as a result of the methane stripping process. These releases will consist of air used in the aeration process with entrained water vapour and methane. There are also likely to be low level emissions

of VOCs associated with the leachate. The Operator reports that the concentration of methane in the emitted air is too low for the air/methane mix to be collected for effective combustion, and no abatement or monitoring of releases to air is carried out at the site. The Operator has not provided any air monitoring data or indicated that any such monitoring has been carried out.

We have considered the discharge of methane and VOCs to atmosphere from methane stripping operations, and consider that releases to atmosphere are not likely to be significant due to the scale and nature of the operations carried out. This is further supported by the Technical Guidance for the Treatment of Landfill Leachate, IPPC S5.03, February 2007, which states that

“Provided that adequate volumes of air are used during the stripping process, concentrations of methane present in exhaust gases will be well below explosive levels. Of greater concern, especially in leachates from relatively recently emplaced wastes, may be potential for release of odorous gases during the stripping process.”

As there have not been any reported complaints about odour, and the consultation response from the South Lakeland District Council Environmental Protection Manager who did not identify any odour issues, we conclude that odorous releases are not an issue of concern at this site, and therefore emissions of methane are unlikely to be a concern.

The Operator regards the releases to air from the two treatment tanks as fugitive releases, however, we have determined that the releases arise from a point source (the top of the treatment tanks), and should therefore be treated as point source releases.

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [leachate treatment tank 1]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required
A2 [leachate treatment tank 2]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required
A3 [leachate treatment tank 3]	No parameters set	Leachate aeration tanks	No limit set	-	-	Permanent sampling access not required

In order to provide data on the methane emissions from the installation, we have set improvement condition IC3, which requires the Operator to calculate methane emissions from the installation.

Emissions to Water

There are no direct discharges to surface water from the installation. No conditions have therefore been imposed.

Emissions to Sewer

Treated effluent leaves the installation in a pipe which discharges to the United Utilities sewer at point S1 (drawing reference ASR4) under a trade effluent consent Ref 7025201322111 dated 5th May 2006. The effluent is treated at the Wigan waste water treatment works (WwTW). United Utilities stated in their letter dated 15th January 2007 that they are satisfied with the Operator's compliance with the terms of the consent.

The discharge consent controls the following parameters:

Daily volume	150 m ³ /24hrs	
Flow rate	2 l/s	
pH	6-10	
Temperature	43.3°C	
Oil/grease	100 mg/l	
COD	100 kg/24hrs	
Sulphides, hydrosulphides, polysulphides, and substances producing hydrogen sulphide on acidification	1 mg/l	
Sulphates	1000 mg/l	
Ammonia	200 mg/l	
Antimony	Individually or in total	10 mg/l
Beryllium		10 mg/l
Chromium		10 mg/l
Copper		10 mg/l
Lead		10 mg/l
Nickel		10 mg/l
Selenium		10 mg/l
Silver		10 mg/l
Tin		10 mg/l
Vanadium		10 mg/l
Zinc		10 mg/l
Compounds that produce hydrogen cyanide on acidification		1 mg/l
Methane		0.14 mg/l
Organo-halogen compounds	Non present	

The Operator carried out an H1 assessment on releases of the treated effluent to the River Douglas from the Wigan WwTW, using standard sewage treatment factors for all parameters with the exception of ammonia; a sewage treatment factor of 0.1 for ammonia was used; the Agency accepts the use of this treatment factor as representative of the ammonia treatment factors that can be achieved by WwTW.

The substances assessed were those which were present in 2004, 2005 and 2006 monitoring results above detection limits and have established EALs: Ammonia (unionised) (as N), Chromium, Copper, Lead, Nickel, Zinc and Vanadium. The H1 assessment results showed that emissions of all parameters with the exception of Ammonia (unionised) (as N) could be screened out as not significant.

On examination of the submitted H1 Water Emissions Inventory it was apparent that the releases reported as Ammonia (unionised) (as N) by the Operator were actually Total Ammonium (as N) releases; values for long-term and short-term releases were taken from 2004, 2005 and 2006 monitoring results (there are no monitoring results for Ammonia (unionised) (as N)). We have re-run the H1 assessment for Total Ammonia (as N), the long-term and short-term Process Contributions are shown below.

	LT PC µg/l	ST PC µg/l
Ammonia (unionised)(as N)	6.36	15.5

The Predicted Environmental Concentration of Total Ammonium was calculated, using 165µg/l as the background concentration of Total Ammoniacal Nitrogen in the River Douglas upstream of the Wigan WwTW discharge point – this value was taken from the Environment Agency website “What’s in my backyard”. The PECs are as follows:

	Background µg/l	LT PEC µg/l	ST PC µg/l
Ammonia (unionised)(as N)	165	171	180

As there is no published EQS or EAL for Total Ammonium, the H1 Assessment tool cannot be used to indicate whether releases are likely to be significant or not, based on the standard method of comparing the PC as a proportion of the EQS or EAL. The Agency expects class RE1 rivers (highest class for water quality to meet the target of 0.25 mg/l Ammonium total as N). The PEC for the installation is below this figure (the short-term PEC is 0.18 mg/l), indicating that this water quality standard would not be breached due to emissions from the installation.

As H1 is a conservative screening tool, the sewage treatment factor applied in the H1 assessment is likely to be conservative, and as the Predicted Environmental Concentrations are below the RE1 classification threshold, we consider that ammonium emissions from the installation are unlikely to have a significant effect on the River Douglas. In addition, it should be noted that discharges from the Wigan WwTW have been assessed separately as part of the Review of Consents.

As we consider that there are no significant releases to water, we have not set ELVs to control the release of any substances to water. The pH range of the leachate indicates that originates from a landfill in a methanogenic stage; this indicates that metals and COD concentrations are likely to decrease with time. In order to ensure that the installation continues to discharge treated leachate at the volumes assessed in the H1

assessment, we have included in table S4.3 the requirement to monitor flow as follows:

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on drawing reference ASR4 (dated 30.10.06)	Flow	Amberswood landfill site effluent treatment plant	No limit set	24 hours	Monthly	In accordance with M18 methodology unless otherwise agreed in writing by the Agency.

In order to ensure that Ammonia (unionised) (as N) emissions are identified and assessed, we have set improvement condition IC3 requiring the Operator to monitor Ammonia (unionised) (as N) emissions and IC4 requires the operator to assess the monitored emissions using the H1 methodology or similar assessment technique (agreed with the Agency), and report the results to the Agency.

Emissions to Land

There are emissions directly to land from the installation. No conditions have therefore been imposed.

BAT Assessment

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes, as described above. We have reviewed emissions and compared them with relevant benchmarks, as described above. We have also reviewed the Operator's assessment of the environmental impact of emissions from the installation and concluded that none of the emissions are likely to lead to significant environmental impacts. ELVs and Improvement Conditions have been set where appropriate.

The proposed techniques / emission levels for priorities for control are in line with the benchmark levels contained in the TGN and, in conjunction with the Improvement Conditions imposed, we consider them to represent BAT for the installation. It is considered that the ELVs and technical measures set in the permit, in conjunction with the Improvement Conditions imposed, will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.

C8 Fugitive emissions of substances

[Permit condition 3.3](#)

Based upon the information we are not fully satisfied that the appropriate measures are in place to prevent fugitive emissions. The operator did not provide evidence to demonstrate satisfactory secondary containment to prevent fugitive emissions to land and groundwater. Therefore we consider that the adequacy of the secondary

containment provided to the treatment tanks should be reviewed having regard to the Sector Guidance Note IPPC S5.03 Technical Guidance for the Treatment of Landfill Leachate, February 2007, with improvements identified and a timetable set to carrying out any identified improvements. This requirement has been made in improvement condition IC1, which has been set to reduce the risk of fugitive releases to land and groundwater.

C9 Conditions relating to Odour

[Permit condition 3.4](#)

Based upon the information in the application we are satisfied that the appropriate measures are in place to prevent annoyance from odour. We have received a consultation response from Wigan Council who did not identify any odour issues.

C10 Noise and vibration

[Permit condition 3.5](#)

Based upon the information in the application we are satisfied that the appropriate measures are in place to prevent annoyance from noise and vibration. We have received a consultation response from Wigan Council who did not identify any noise or vibration issues.

C11 Monitoring

[Permit condition 3.6](#)

The monitoring requirements set in table S4.3 have been imposed in order to ensure that the volume and flow rate of discharged effluent used in the H1 assessment remains representative of emissions from the installation.

Based on the information in the application we are not fully satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate. Improvement condition IC2 has been set requiring the operator to provide a programme to achieve MCERTS equipment, techniques and personnel for monitoring discharges to sewer.

The Operator states in the application that records will be held by the LPT Compliance Manager in an appropriate electronic EMS filing system.

C13 Reporting

We have specified reporting as described in Schedule 5 for the following reasons:

- Quarterly reporting of monthly monitoring results for the flow parameters listed in table S4.3, in order to ensure that releases from the installation remain as assessed in the H1 assessment.
- Annual reporting of non-hazardous leachate treated – to ensure compliance with permitted quantities.

- The consumption of energy is required to allow the Agency to assess any long term change in efficiency of use per unit output, at the installation.

The reporting frequencies of the parameters detailed above are deemed sufficient and proportional for the Installation.

C14 Miscellaneous

No specific issues have been identified.

Part D: Other legal requirements

Consideration has been given to the Waste Management Licensing Regulations 1994 (WMLR 1994). This has been addressed within section C7 above.

There are no European Habitats within 10km of the Installation. Bryn Marsh and Ince Moss SSSI is located 1.9km south-west of the site. The site is a wetland site designated for its fen and mire habitats and associated species. There is no hydrological connection between the installation and the SSSI. Releases to air from the installation consist of low concentrations of methane from methane-stripping operations. We consider that methane emissions arising from such leachate treatment methane stripping operations will be not significant. This is supported by the Technical Guidance for the Treatment of Landfill Leachate, IPPC S5.03, February 2007, which states that

“Provided that adequate volumes of air are used during the stripping process, concentrations of methane present in exhaust gases will be well below explosive levels. Of greater concern, especially in leachates from relatively recently emplaced wastes, may be potential for release of odorous gases during the stripping process.”

As there have not been any reported complaints about odour, and the consultation response from Wigan Council did not identify any odour issues, we conclude that odorous releases are not an issue of concern at this site, and therefore emissions of methane are unlikely to be a concern.

In addition, it is noted that any emissions from the installation will be dispersed and their concentration further reduced over the 1.9km separating the installation from the SSSI. For these reasons we consider that emissions from the installation will not have a significant effect on the SSSI. An appendix 4 form has been completed to this effect.

ANNEX 1: CONSULTEE AND PUBLIC RESPONSES

Advertising and statutory consultation

Summary of responses to advertising and statutory consultation and the way in which we have taken these into account in the determination process:

Brief summary of issues raised	Response received from	Summary of actions taken or show how this has been covered
Confirm the discharge from the installation is made under an extant Consent to Discharge, and have no issues with effluent quality or quantity. Believe co-treatment of effluent at a WwTW represents BAT for this process.	United Utilities Ltd	Noted.
Based on information provided in the application, the Trust considers adverse effects on human health from the operation of the installation to be unlikely.	Ashton, Leigh and Wigan NHS Primary Care Trust	Noted.
Provided suitable waste acceptance procedures are in place the FSA considers that emissions from the installation are unlikely to have unacceptable effects on the food chain.	Food Standards Agency	Permit condition 2.3.1, Operating Techniques, requires the Operator to follow the techniques stated in the application: these techniques follow the relevant TGN (TGN IPPC S5.03).
No issues raised	Wigan Council	None

ANNEX 2 Improvement conditions

Ref no	Condition	Date	Reason
IC1	The Operator shall review the adequacy of secondary containment around all leachate treatment tanks and identify improvements required, having regard to the Agency Sector Guidance Note IPPC 5.03 Technical Guidance for the Treatment of Landfill Leachate, February 2007. The Operator shall submit a written report to the Environment Agency, identifying the existing secondary containment and identified improvements and a timetable for carrying out the identified improvements.	17 th June 2008	Agency requirement to ensure BAT is in place for protection of ground and groundwater. See also Decision Document Section C8.
IC2	The operator shall provide and maintain monitoring of effluent flow to sewer to the MCERTS standard. A copy of the first MCERTS site conformity inspection certificate shall be submitted to the Environment Agency.	17 th September 2008	Agency requirement to ensure BAT is in place for monitoring of emissions to sewer. See also Decision Document Section C7 and C11.

IC3	<p>The Operator shall carry out an assessment of the volume of methane released to air from the installation over a 12 month period. The volume shall be calculated on the basis of methane removal from the leachate.</p> <p>The assessment shall also include consideration of how the volume of methane released to air will vary as the quality and volume of leachate changes over time.</p> <p>The Operator shall prepare and submit a written report on the assessment.</p>	17 th March 2009	Agency requirement to ensure BAT is in place for prevention of emissions to air – see also Decision Document Section C6.
IC4	<p>The Operator shall submit an environmental impact assessment which evaluates the potential for impact arising from the release from the installation of ammonia (unionised) (as N) to sewer. The assessment shall use the Agency's H1 tool (or other equivalent assessment tool used with the written agreement of the Agency), using actual data for unionised ammonia. An electronic copy of the H1 assessment (or other equivalent assessment tool used with the written agreement of the Agency) shall be submitted to the Agency.</p>	17 th September 2008	Agency requirement to ensure there is no significant pollution from emissions to sewer – see also Decision Document Section C6.
IC6	<p>The Operator shall develop a written site closure plan, having regard to the Agency Sector Guidance Note IPPC S5.03 Technical Guidance for the Treatment of Landfill Leachate, February 2007. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.</p>	17 th September 2008	Agency requirement to ensure BAT is in place for site closure. See also Decision Document Section C5.

ANNEX 3 Waste treatment sector specific conditions

Conditions to be added to the standard PPC Permit Template V3 (dated 29 March 2006) for all waste treatment and storage facilities as agreed with PPC Waste Policy, PPC Waste Process, HO Legal and SPG legal.

Introductory note	Permit addition	Justification for the condition / Regulatory basis
After Table: Superseded or Partially Superseded Environmental Licences etc insert additional text:	The waste management licence shall cease to have effect if and to the extent that the treatment, keeping or disposal of waste authorised by the licence is authorised by this permit.	Necessary to deliver PPC Regulations Schedule 10 paragraph 5, and amendment of section 35 (11) of EPA90.
Condition Number	Permit condition	Justification for the condition / Regulatory basis
2.1.2	Where there are wastes on site that are not subject to this permit then the wastes subject to the activities authorised under condition 2.1.1, shall be clearly identified.	Necessary to deliver the requirements of Article 9 of the Waste Framework Directive, and Regulation 23 of the PPC regulations.
2.3.3(c)	Waste shall only be accepted if: (c) it is only processed in the activity specified in Table S1.1 of Schedule 1	Necessary to deliver the permitting requirements of Article 9 of the Waste Framework Directive and Article 2 of the Hazardous Waste Directive. A specific table is required because of the need to link waste types to each process, due to compatibility issues and previous serious incidents e.g. Park Environmental, South Wales.
2.3.5	The Operator shall ensure that where waste produced at the Permitted Installation (s) is sent to a waste recovery or disposal facility, the facility in question is provided with the following information, prior to receipt of the waste: <ul style="list-style-type: none"> • The nature of the process producing the waste • The composition of the waste • The handling requirements of the waste • The hazard classification associated with the waste The waste code of the waste	Necessary to ensure that waste destined for recovery or disposal meets the relevant pre-acceptance criteria for the recovery or disposal facility. The regulatory basis for this condition is reg 11(3)(a) and reg 12(9)(b) of the PPC regulations. NOTE: This condition does not include appropriate packing and labelling as this should already be covered via the incorporation condition.
2.3.6	The Operator shall ensure that where waste produced at the Permitted Installation (s) is sent to a landfill site it meets the waste acceptance criteria for that landfill.	Necessary to ensure that waste destined for landfill meets the waste acceptance criteria for that landfill. The regulatory basis for this condition is reg 11(3)(a) and reg 12 (9) (b) of the PPC regulations.
Incorporation of the application form		
Schedule 1, Table S1.2	Table S1.2 should include the following questions in the application form: 2.14 to 2.1.24 and 2.2 , as required	Incorporation into the permit of the key operational controls is necessary to ensure that the best available techniques are used to prevent pollution (regulation 11(2)(a)), and that the appropriate measures are taken to prevent accidents (regulation 11(3)(c)) .