



**ENVIRONMENT
AGENCY**

Permit with introductory note

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

Old Quarrington Quarry Landfill
Tarmac Limited
Near Bowburn
County Durham
DH6 5NN

Permit number

TP3730BA

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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 an inert landfill installation covered by the description in Section 5.2 A(1) (b) in Part 1 of Schedule 1 to the PPC Regulations, to the extent authorised by the Permit: i.e

(b) The disposal of waste in any other landfill to which the Landfill Regulations apply.

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 are as follows

Old Quarrington Quarry Landfill is located at national grid reference NZ 3290 3780, approximately 8km south east of Durham. The Installation is largely surrounded by agricultural land. The nearest building to the installation is the Heather Lad Inn that is located 25m to the north east of the Installation boundary. The Installation is bounded to the east by a minor road and a graveyard, to the north by open fields, to the west by a minor road and to the south a public footpath. Old Quarrington village lies approximately 190m to the south west of the Installation boundary.

The Installation is located within a groundwater Source Protection Zone III. The Installation lies within Magnesian Limestone, underlain by Permian Marl Slate and underlain by Permian Basal Sand with coal measures underneath. The basal level of the site is the top of the coal measures. The sand and limestone are both classified as Major Aquifers. The site is located 480 metres from Quarrington Hill Grasslands (SSSI) and 700 metres from Cassop Vale (SSSI).

The site is an operational sand and limestone quarry. Waste disposal activities were authorised by a Waste Disposal Licence DUR105 (EAWML67101) which was issued by Durham County Council in 1982 for the disposal of construction and demolition waste.

The landfill is a single phase development with an overall capacity of the Installation is 2,593,000 m³ (based on the conversion factors proposed by the applicant this equates to 4,667,400 tonnes). The Permit limits the disposal of waste to 204,000 tonnes per year.

The Installation includes the following directly associated activities: discharge from the surface water management system to controlled water and storage of fuel for operation of plant and equipment.

The main emissions from the site are likely to be discharges to surface water, noise and vibration, dust and mud.

Due to the permitted waste types there is no active management of leachate or landfill gas at the site. Monitoring boreholes are installed internally and externally to the site to allow monitoring of groundwater and landfill gas migration.

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
N/A	N/A	N/A

Superseded Licences/Authorisations/Consents relating to this Installation		
Holder	Reference Number	Date of Issue
Hepplewhites Quarries Ltd	DUR105 (EAWML67101)	21/04/1982

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.

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	Reference Number	Date of issue
Not applicable		

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	
<i>Application TP3730BA</i>	<i>Received 09/11/2004</i>	
<i>Response to request for information</i>	<i>Request dated 03/06/2005</i>	<i>Responses dated 29/07/2005 and 25/08/2005</i>
<i>Request to extend determination</i>	<i>Request dated 24/05/2005</i>	<i>Response dated 02/06/2005</i>
<i>Request to extend determination</i>	<i>Request dated 30/09/2005</i>	<i>Response dated 06/10/2005</i>
<i>Response to request for information</i>	<i>Request dated 19/09/2005</i>	<i>Response dated 04/11/2005</i>
<i>Permit determined 07/11/2005</i>		

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

TP3730BA

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 **Tarmac Limited** ("the Operator"),

whose Registered Office is

**Millfields Road
Ettingshall
Wolverhampton
West Midlands
WV4 6JP**

Company registration number **00453791**

to operate an installation at

**Old Quarrington Quarry Landfill
Near Bowburn
County Durham
DH6 5NN**

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

The landfill authorised by this Permit is for the disposal of inert waste.

Signed

Date

	<i>7th November 2005</i>
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Martin Jenkins

Authorised to sign on behalf of the Agency

Environment Agency, Richard Fairclough House, Knutsford Road, Warrington, Cheshire, WA4 1HX.

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 5.2 Part A(1) (b)The disposal of waste in a landfill.	Landfill for inert waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling, storage and disposal of inert wastes, consisting of the types and quantities specified in condition 2.1.3, as an integral part of landfilling.
<i>Associated Activity</i>		
Water discharges to controlled waters.	Discharge of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.
Fuel Storage.	Storage of fuel for operation of plant and equipment	From fuel storage tank to point of use within the installation.

- 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.

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.

Table 1.4.1: Improvement programme requirements

Reference	Requirement	Date
1.4.1.1	The Operator shall submit to the Agency for approval a Surface Water Management Plan. The plan shall take into account the requirements listed in sections 2.2.33 and 2.2.34 of Part B of the application. The plan shall also include the following: A proposed surface water monitoring schedule in accordance with Agency's Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water. This proposal shall cover both initial characterisation and routine monitoring and must include as a minimum the surface water emission point (SW2) and two surface water monitoring points on Bowburn Beck, one upstream (SW1) and one downstream (SW3) of where the drainage channel into which "SW1" flows into the Beck. Where surface water management plan requires additional collection ditches to be constructed the operator shall put forward to the Agency a timetable for their completion. Immediately following installation the agreed monitoring locations shall be included in the surface water monitoring programme. A plan showing the location of the surface water monitoring points. The Operator shall undertake any measures notified in writing by the Agency by the date indicated in the notification.	07/04/2006
1.4.1.1 A	Following the installation of the surface water collection ditches required by Improvement Condition 1.4.1.1 the Operator shall obtain 12 months of monthly site-specific data to derived specific control and compliance limits. These will replace the interim compliance limits included in this Permit following agreement from the Agency. The Operator shall undertake any measures approved in writing by the Agency to the timescale indicated in the approval.	07/05/2007
1.4.1.2	The Operator shall submit to the Agency for approval proposals for the installation of additional in-waste gas monitoring boreholes. There shall be a minimum number of 2 monitoring boreholes per hectare. The proposals shall include design drawings, details of the well specification. All boreholes shall be located, designed and constructed in accordance with Agency's "Guidance on the Management of Landfill Gas" (LFTGN 03). The boreholes shall be installed within two months of the date of approval. Immediately following there construction these boreholes shall be included in the landfill gas monitoring programme. Following submission of the proposals required by this condition the Operator shall undertake any measures notified in writing by the Agency by the date indicated in the notification.	07/06/2006
1.4.1.3	The Operator shall provide the Agency for approval, in writing, proposals for carrying out monitoring and assessment of particulate emissions, in accordance with Agency Technical Guidance Document M17, "Monitoring of Particulate Matter in Ambient Air Around Waste Facilities", for the parameters required by Table 2.2.7. The proposals shall include but not be limited to operating procedures for the implementation of monitoring measures, schedules, techniques, compliance action plans, data management and reporting procedures. The Operator shall undertake any measures approved in writing by the Agency to the timescale indicated in the approval.	07/03/2006
1.4.1.4	The operator shall replace groundwater monitoring borehole P-01 at an adjacent location with two piezometers designed and installed to monitor: a) groundwater perched in the limestone unit above the Permian Marl, and b) groundwater in the Permian Sands unit at its interface with the coal measures. The operator shall ensure that the construction of the piezometers does not allow groundwater perched in the shallower limestone stratum to contaminate the deeper groundwater in the Permian Sands. The borehole shall be designed and constructed in accordance with the Agency's "Guidance on the Monitoring of landfill Leachate, Groundwater and Surface Water" (LFTGN 02). Immediately following its construction this borehole shall be included in the groundwater monitoring programme. The Operator shall undertake any measures approved in writing by the Agency to the timescale indicated in the approval.	07/02/2006

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 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 where:
- ◆ inert 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:
- Artificially established geological barrier;
 - Perimeter gas monitoring boreholes;
 - Groundwater monitoring borehole;
 - In-waste landfill gas boreholes;
 - Surface water drainage system;
- for that part and that it is confirmed in writing by the Agency that the landfill base and sides shall consist of a mineral layer which provides protection of soil, groundwater and surface water at least the following permeability and thickness requirements in a landfill for inert waste: $k \leq 1.0 \times 10^{-7}$ metre/second: thickness ≥ 1 metres or 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, stability assessment 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 specific off-site conditions specified in Part 1.7 of this Permit. Controls on such emissions are included in Parts 2.2.2 (Emissions to water other than groundwater).

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, 2.5, 2.6, 2.8, 2.9 and 2.10 in part B of the Application Form and those related parts of the application. Excluding the response to questions 2.2.33, 2.2.34, 2.2.47, 2.2.64 and 2.2.73.	09/11/2004
Crestwood Environmental letter regarding requests for information dated 03/06/2005.	Excluding the responses to questions 17 and 24.	29/07/2005 and 25/08/2005
Hafren Water letter regarding request for information at meeting on 19/09/2005.	All	07/11/2005

- 2.1.2 No condition applies.

- 2.1.3 Wastes shall only be accepted for disposal at the landfill if:

- 2.1.3.1 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	Not Permitted
Inert	Permitted
Liquid wastes (including waste waters but excluding sludge).	Not Permitted.
Waste which in the conditions of landfill is explosive, corrosive, oxidising, highly flammable or flammable.	Not permitted
Hospital and other clinical infectious wastes from medical or veterinary establishments.	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
Whole used tyres (other than tyres used as engineering materials, bicycle tyres and tyres with an outside diameter of more than 1400mm).	Not permitted
Shredded used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm).	Not Permitted
Any waste which does not fulfil the relevant waste acceptance criteria.	Not Permitted
Waste which has been diluted or mixed solely to meet the relevant waste acceptance criteria.	Not Permitted
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.	Not Permitted

And

- 2.1.3.2 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.
- 2.1.3.3 All waste approved under condition 2.1.3 shall be characterised in accordance with the Landfill 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.
- 2.1.3.4 The Operator shall ensure that where representative samples are taken for analysis they are taken in accordance with the Landfill 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.
- 2.1.4 The Operator on accepting each delivery of waste shall provide a written receipt to the person delivering it.
- 2.1.5 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.
- 2.1.6 The total quantity of waste that shall be deposited in the landfill shall not exceed 4,667,400 tonnes.
- 2.1.7 The quantity of waste that is deposited in the landfill in any year shall not exceed 204,000 tonnes.
- 2.1.8 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 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.

2.2.2 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 surface water from the emission point specified in Table 2.2.4 shall only arise from the source specified in that Table.

Table 2.2.4: Emission point to surface water

Emission Point Reference and/or location description	Source	Receiving Water
SW2 on as described on page 8 of the ESID, and additional discharge location/s to be agreed in accordance with condition 1.4.1.1.	Surface water run-off from the site	Bowburn Beck Location/s to be agreed in accordance with condition 1.4.1.1.

2.2.2.4 The Operator shall carry out surface water monitoring of the parameter(s) listed in Table 2.2.4A, at the specified monitoring points and at least at the frequencies specified in that Table.

2.2.2.5 The compliance limits for the parameters and monitoring point set out in Table 2.2.4A shall not be exceeded.

Table 2.2.4A: Surface Water Monitoring

Monitoring point	Parameter	Compliance Limit ¹	Units/Description	Monitoring frequency
SW2 - on as described on page 8 of the ESID, and additional discharge locations to be agreed in accordance with improvement condition 1.4.1.1.	Suspended solids	60	mg/l	Quarterly
	Ammonia	0.5	mg/l	Quarterly
	pH	>6 to <9	pH units ²	Quarterly
	Visible oil	None	Visible trace	Daily
SW1 - Upstream, SW3 - Downstream, and additional monitoring locations to be agreed in accordance with improvement condition 1.4.1.1.	Ammonia	0.5	mg/l	Quarterly
	Suspended solids	60	mg/l	Quarterly
	pH	>6 to <9	pH units ²	Quarterly

1. Laboratory detection limits are specified in Schedule 7

2. Typical instrument accuracy required, rather than reporting value.

2.2.2.6 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

Emissions to sewer

2.2.2.6 There are no specific controls imposed on emissions to sewer in this Part of the Permit.

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 Operator shall carry out groundwater monitoring of the parameters listed in Table 2.2.8 at the specified monitoring points and at least at the frequencies specified in that Table.

Table 2.2.8: Groundwater Monitoring

Emission point	Parameter ¹	Monitoring frequency
(O/P) –01, (O/P) -02 (O/P) -03 and (O/P)-04 shown on drawing Q003 and/or any borehole installed in accordance with improvement condition 1.4.1.4.	Groundwater level m AOD	Monthly
	pH	Quarterly
	Ammoniacal Nitrogen	Quarterly
	Chloride	Quarterly
	Conductivity	Quarterly
	Chemical Oxygen Demand	Quarterly
	Total Organic Carbon	Quarterly
	Total Oxidised Nitrogen	Quarterly
	Calcium	Six-Monthly
	Magnesium	Six-Monthly
	Sodium	Six-Monthly
	Potassium	Six-Monthly
	Sulphate	Six-Monthly
	Iron	Six-Monthly
	Manganese	Six-Monthly
	Cadmium	Six-Monthly
	Chromium	Six-Monthly
	Copper	Six-Monthly
	Nickel	Six-Monthly
	Lead	Six-Monthly
	Zinc	Six-Monthly
	Antimony	Six-Monthly
	Selenium	Six-Monthly
	Molybdenum	Six-Monthly
	Full List I and List II screen	Annually

1. Laboratory detection limits are specified in Schedule 7

2.2.3.5 If the control levels for emissions to groundwater for the parameter(s) and monitoring points set out in Table 2.2.8A are exceeded the actions detailed in the Groundwater Action Plan shall be instigated.

Table 2.2.8A: Control levels for emissions to groundwater

Monitoring location	Parameters	Control level	Units
(P) –01, (P) - 02 and (P) – 03 shown on drawing Q003 and/or any downgradient borehole installed in accordance with improvement condition 1.4.1.4	Ammoniacal Nitrogen	0.2	mg/l
	Chloride	56	mg/l

2.2.3.6 The trigger levels for emissions to groundwater for the parameter(s) and monitoring point(s) set out in Table 2.2.9 shall not be exceeded.

Table 2.2.9: Trigger levels for emissions to groundwater

Monitoring location	Parameters	Trigger level	Units
(P) – 01, (P) - 02 and (P) – 3 shown on drawing Q003 and/or any downgradient borehole installed in accordance with improvement condition 1.4.1.4.	Ammoniacal Nitrogen	0.39	mg/l
	Chloride	250	mg/l

2.2.3.7 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 response in Section 1.41 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.

- 2.2.4.3 The Operator shall carry out monitoring of the parameter listed in Table 2.2.7 at the specified monitoring point and at least at the frequency specified in that table.
- 2.2.4.4 The limits for particulate matter emissions to air for the parameter and monitoring point set out in Table 2.2.7 shall not be exceeded.

Table 2.2.7 Particulate matter emission limits into air

Monitoring Point	Parameters/ Emission Limit	Frequency
Site boundary adjacent to the Heather Lad Pubic House	Dust – 200 mg/m ² per day	Monthly when operations are within 100m of the monitoring point

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 All emissions to air from the Installation shall be free from offensive odour as perceived by an Authorised Officer of the Agency outside the installation boundary except that the Operator shall not be taken to have breached this condition if the Operator has ensured that all appropriate measures are taken to prevent or where that is not practicable, to reduce, such odorous emissions.

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 The Operator shall use all appropriate measures so as to prevent, or where that is not practicable, to reduce, emissions of dirt and mud 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.
- 2.2.7.3 In the event that dirt and mud arising from the installation is deposited outside the installation it shall be cleared away as soon as practicable and in any event by the end of the working day.
- 2.2.7.4 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 Agreement made between the Operator and the Agency dated 7th November 2005 shall be maintained by the Operator throughout the subsistence of this Permit and the Operator shall produce evidence of such provision whenever required by the 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
 - (c) the estimated costs for the closure and after-care of the landfill site for a period of at least 30 years, or such other period as agreed in writing with the Agency, 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 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 No condition applies.

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 so as to avoid reasonable cause for annoyance from noise or vibration, in particular by:
- equipment maintenance e.g. 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 2.2.4 (surface water), 2.2.8 (groundwater), 2.10.1 (in-waste landfill gas), and 2.10.3 (perimeter landfill gas) 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.

Monitoring - General

- 2.10.2 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.
- 2.10.3 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.
- 2.10.4 The operator shall be provide:
- 2.10.4.1 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
- 2.10.4.2 safe means of access to other sampling/monitoring points when required by the Agency.

Landfill Gas

- 2.10.5 The Operator shall carry out in-waste landfill gas monitoring of the parameters listed in Table 2.10.1 at the specified monitoring points and at least at the frequencies specified in that Table.

Table 2.10.1: In-waste landfill gas emission monitoring

Monitoring points	Parameters	Frequency of monitoring
5, 6, 7, 8, 9, and 10 as shown on drawing MEL Q3/1 and boreholes installed in accordance with improvement condition 1.4.1.2.	Methane	Quarterly
	Carbon Dioxide	Quarterly
	Oxygen	Quarterly
	Differential Pressure	Quarterly
	Atmospheric Pressure	Quarterly

2.10.6 If the control levels for emissions of landfill gas for the parameter(s) set out in Table 2.10.2 are exceeded the Operator shall:

- within one week re-sample the monitoring location/s where the exceedence occurred;
- where re-sampling confirms the exceedence the monitoring frequency shall be increased to monthly; and
- instigate an investigation into the reason for the exceedence. A report of the investigation shall be forwarded to the Agency within three months from the date of confirmation of exceedence, the report shall assess whether gas generation from the wastes is likely to give rise to risk to public health or the environment or a nuisance.

Table 2.10.2: Control levels for in-waste landfill gas emissions into air

Monitoring points	Parameters	Units/Accuracy	Control Level
5, 6, 7, 8, 9, and 10 as shown on drawing MEL Q3/1 and any other boreholes installed in accordance with improvement condition 1.4.1.2.	Methane	% v/v, 0.1%	< 0.8 %
	Carbon Dioxide	% v/v, 0.1%	< 2.0 %

2.10.7 The Operator shall carry out perimeter landfill gas monitoring of the parameters listed in Table 2.10.3 at the specified monitoring point(s) and at least at the frequencies specified in that Table.

Table 2.10.3: Perimeter landfill gas emission monitoring

Emission Points	Parameters	Frequency of monitoring
1, 2, 3, 4 and 11 as shown on drawing MEL Q3/1 and any other borehole installed in accordance with condition 2.10.9.	Methane	Quarterly
	Carbon Dioxide	Quarterly
	Oxygen	Quarterly
	Atmospheric Pressure	Quarterly

2.10.8 The trigger levels for emissions to air for the parameter(s) and monitoring point(s) set out in Table 2.10.4 shall not be exceeded:

Table 2.10.4: Trigger levels for perimeter landfill gas emissions into air

Monitoring points	Parameters	Units/Accuracy	Trigger Level
1, 2, 3, 4 and 11 as shown on drawing MEL Q3/1 and any other borehole installed in accordance with condition 2.10.9.	Methane	% v/v, 0.1%	< 1.0 %
	Carbon Dioxide	% v/v, 0.1%	< 5.0 %

2.10.9 No disposal of wastes shall take place in any part of the Permitted Installation where waste deposit commences after the issue of this Permit unless additional perimeter landfill gas monitoring locations are installed 6 months prior to waste deposits taking place. All these boreholes shall be located, designed and constructed in accordance with Agency "Guidance on the Management of Landfill Gas" (LFTGN 03). Immediately following their construction these boreholes shall be included in the landfill gas monitoring programme.

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 2.11 In Part B of the application form.	09/11/2004

- 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 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.
- 2.11.4 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.
- 2.11.5 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 This is not a multi-Operator installation.

2.13 Transfer to effluent treatment plant

- 2.13.1 No transfer from the Permitted Installation shall be made to effluent treatment plant.

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 No condition applies.
- 4.1.8 The Operator shall review the monitoring results for waste characterisation, landfill gas, 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 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.

"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 2.2.2.3, 2.2.4 or 2.2.5 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.

"Landfill Regulations" means the Landfill (England and Wales) Regulations SI 2002 No. 1559, (as amended) 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 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.

"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 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 Tarmac Limited

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 Tarmac Limited

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
Emissions to water (other than sewer) Parameters as required by condition 2.2.2.4	SW1, SW2, SW3 and Additional discharge location/s from collection ditches to be agreed in accordance with improvement condition 1.4.1.1.	Quarterly for all parameters monitored at a daily, monthly or quarterly frequency and annually for all parameters monitored at an annual frequency.	From the date of issue of this Permit. Additional points from the date of installation of surface water collection system.
Groundwater Parameters required by conditions 2.2.3.4	(P) – 01, (P) – 02, (P) – 03 and (P) - 04	Quarterly for all parameters monitored at a quarterly frequency and annually for all parameters monitored at a lesser frequency	From the date of issue of this Permit. For Monitoring Points installed as a requirement of condition 2.2.3.7, monitoring shall commence from the date of installation.
Particulate Parameters required by conditions 2.2.4.4	Site boundary adjacent to the Heather Lad Pubic House	Quarterly for all parameter monitored at a monthly frequency	From the date that operations are within 100m of the monitoring point
Landfill Gas As required by conditions 2.10.5, 2.10.7 and 2.10.9 and as required by improvement condition 1.4.1.2	Monitoring points specified by conditions 2.10.5, 2.10.7 and 2.10.9 and as required by improvement condition 1.4.1.2	Quarterly for all parameters monitored at a quarterly	From the date of issue of this Permit. For Monitoring Points installed as a requirement of condition 2.10.9 and improvement condition 1.4.1.2 monitoring shall commence one month from the date of installation
Waste Summary		Quarterly	From date of issue of this Permit
Waste Body ¹		Annually	From date of issue of this Permit

1 Volume and composition of waste deposited in the previous 12 months. Calculation of remaining capacity in cubic metres accounting for settlement.

Annually

Surveying of the settling behaviour of the landfill during the operating and after care phases

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 0.005 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 0.01m 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
Groundwater	None provided. Reporting format to be agreed in writing with the Agency.	
Particulate	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.	
Surface Water	None provided. Reporting format to be agreed in writing with the Agency.	
Waste Summary	None provided. Reporting format to be agreed in writing with the Agency.	
Waste Body	None provided. Reporting format to be agreed in writing with the Agency.	

Schedule 4 - Reporting of performance data

Not Applicable

Schedule 5 - Site Plan

[illegible]

Detection limit		
Measurement	Detection limit	Unit
Water level	0.01	metres A. O. D.
pH	60.5 ¹	pH units
EC	10	$\mu\text{S}/\text{cm}^2$
SS	5	mg/l
NH4-N	0.1	mg/l
TON (oxidised-N)	0.2	mg/l
TOC	1	mg/l
COD	20	mg/l
Ca	20	mg/l
Mg	20	mg/l
Na	10	mg/l
K	10	mg/l
SO4	10	mg/l
Cl	10	mg/l
Fe	50	$\mu\text{g}/\text{l}$
Mn	10	$\mu\text{g}/\text{l}$
Cd	1	$\mu\text{g}/\text{l}$
Cr	10	$\mu\text{g}/\text{l}$
Cu	10	$\mu\text{g}/\text{l}$
Ni	10	$\mu\text{g}/\text{l}$
Pb	10	$\mu\text{g}/\text{l}$
Zn	10	$\mu\text{g}/\text{l}$
Antimony	1	$\mu\text{g}/\text{l}$
Selenium	5	$\mu\text{g}/\text{l}$
Molybdenum	1	$\mu\text{g}/\text{l}$

END OF PERMIT