

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Mick George Limited
Witcham Meadlands Landfill Site
Block Fen Drove
Mepal
Chatteris
Cambridgeshire
CB6 2AY

Variation application number

EPR/LP3996ND/V006

Permit number

EPR/LP3996ND

Witcham Meadlands Landfill Site

Permit number EPR/LP3996ND

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made.

This variation authorises the following changes to the Permit:

- The deepening of the asbestos and stable non reactive hazardous waste (SNRHW) cells by up to 10m increase in depth.
- Variation of the annual throughput of waste for the asbestos and SNRHW cells from 50,000 tonnes to 200,000 tonnes.
- Reduction in annual inert waste deposit from 200,000 tonnes to 50,000 tonnes.
- Addition of 9 waste codes for input to the SNRHW cell.

A non-technical summary of the installation is repeated for clarity, the main features of the installation are as follows:

Witcham Meadlands Landfill is situated in an area of sand and gravel deposits underlain by the Ampthill Clay. The site is located at grid reference TL 4378 8390 to the north of Mepal. It is situated in an area of fenland at Block Fen, with Forty Foot of Vermuden's Drain to the north and Old Bedford River to the east and south. The Ouse Washes are a designated Site of Special Scientific Interest, Special Protection Area and Ramsar site. This habitat lies within 5km of the landfill.

The sand and gravel deposits have been excavated and the area is to be restored by the landfilling of inert waste, which is authorised by this permit. There is also a waste reception facility, waste sorting area and a quarantine area within the boundary of the Permit. The base of the site is below the water table. The site will be designed to meet the requirements of the Landfill Directive (England and Wales) Regulations 2002, in part by the use of a natural geological barrier to the base and the installation of a barrier to the sides of the landfill using indigenous clay. The landfill covers an area of 44.15 hectares and the void space of 1.3 million cubic metres.

The schedules specify the changes made to the 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 BX03771X	Received 17/12/03	
Response to Schedule 4 Notice	Request dated 29/03/04	Response by e-mail dated 02/04/04
Response to Schedule 4 Notice	Request dated 13/04/04	17/09/04 ESI document
Response to Schedule 4 Notice	Request dated 29/09/04	Responses received 27/10/04, 18/02/05 and 23/02/05

Status log of the permit		
Description	Date	Comments
Response to Schedule 4 Notice	Request dated 21/03/05	Responses received letter 14/04/05, Documents 08/06/05, letter 21/06/05, Document 12/07/05, letter 12/08/05, letter 14/09/05
Request to extend determination date of Schedule 4 Notice	Request dated 20/06/05	Request accepted 22/06/05
Request to extend determination date of Schedule 4 Notice	Request dated 11/07/05	Request accepted 25/07/05
Request to extend determination date of Schedule 4 Notice	Request dated 01/09/05	Request accepted 01/09/05
Permit determined BX0377IX	16/12/05	
Agency initiated variation UP3230MD issued	25/06/07	
EPR permit number issued EPR/LP3996ND/A001	17/11/09	
Variation Application EPR/LP3996ND/V002	Received 17/11/09	
Variation EPR/LP3996ND/V002 determined	19/08/2010	
Variation EPR/LP3996ND/V003	05/02/2014	Application returned.
Application EPR/LP3996ND/V004 (variation and consolidation)	Duly made 08/12/14	Application to vary and update the permit to modern conditions, extend the current non-hazardous waste cell and allow importation of Stable Non Reactive Hazardous Wastes (SNRHW) and Asbestos Wastes and alter the final restoration surface of Cell 9 to accelerate water run-off.
Schedule 5 request for information	12/01/15 & 26/01/15	Updated hydrogeological risk assessment (HRA), new site plan, new European Waste Catalogue code tables.
Variation determined EPR/LP3996ND/V004 PAS/Billing Ref: VP3938WZ	29/05/15	Varied and consolidated permit issued in modern condition format.
Variation EPR/LP3996ND/V005	11/03/16	Application withdrawn by operator.
Application EPR/LP3996ND/V006	Duly made 13/09/16	Variation to increase the depth of the asbestos and stable non reactive hazardous waste (SNRHW) cells; variation of the annual throughput for the asbestos, SNRHW and inert cells and addition of waste codes for input to the SNRHW cell.
Schedule 5 request for information dated 19/09/16	30/09/16 & 04/11/16	Responses to answers 1 - 10.
Schedule 5 request for information dated 27/01/17	08/02/17	Response to question 1 regarding leachate management.
Variation determined EPR/LP3996ND/V006	17/03/17	Varied and consolidated permit issued.

End of introductory note

Notice of variation and consolidation

The 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 and consolidates

Permit number

EPR/LP3996ND

Issued to

Mick George Limited (“the operator”)

whose registered office is

6 Lancaster Way
Ermine Business Park
Huntingdon
Cambridgeshire
PE29 6XU

company registration number **02417831**

to operate a regulated facility at

Witcham Meadlands Landfill Site
Block Fen Drove
Mepal
Chatteris
Cambridgeshire
CB6 2AY

to the extent set out in the schedules.

The notice shall take effect from 17/03/2017

Name	Date
M Bischer	17/03/2017

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/LP3996ND

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/LP3996ND/V006 authorising,

Mick George Limited (“the operator”),

whose registered office is

6 Lancaster Way
Ermine Business Park
Huntingdon
Cambridgeshire
PE29 6XU

company registration number **02417831**

to operate an installation at

Witcham Meadlands Landfill Site
Block Fen Drove
Mepal
Chatteris
Cambridgeshire
CB6 2AY

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

Name	Date
M Bischer	17/03/2017

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 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.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 16th December 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 Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
- (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 1.2; and
 - (c) the estimated costs for the closure and aftercare of the landfill.

1.3 Energy efficiency

- 1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) The operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) Implement any appropriate measures identified by a review.

1.4 Efficient use of raw materials

- 1.4.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) 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 four 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 further appropriate measures identified by a review.

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

- 1.5.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) 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 four years whether changes to those measures should be made; and
 - (c) take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only 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 green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) 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 Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.4 Improvement programme

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

2.5 Landfill Engineering

- 2.5.1 No construction of any new cell of the landfill shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

- 2.5.2 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) where the operator proposes to construct any new cell other than the first cell, but proposes no change from the design of the most recently approved cell which could have any impact on the performance of any element of the design, no construction of the new cell shall commence until the operator has submitted a cell layout drawing and the Environment Agency has confirmed that it is satisfied with the cell layout drawing.
- 2.5.3 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) the construction of a new cell shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.5.4 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) no disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.5.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.5.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.5.7 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.5.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.5 and 2.5.6 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.5.9 For the purposes of conditions 2.5.1, 2.5.2, 2.5.4 and 2.5.5, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.
- 2.5.10 Where the Environment Agency has required further information under condition 2.5.9(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.

2.6 Waste acceptance

- 2.6.1 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 2, and
 - (b) they are non- hazardous waste or asbestos or stable, non reactive hazardous wastes, and

- (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm), and
- (d) they are not shredded used tyres, and
- (e) they are not liquid waste (including waste waters but excluding sludge), and
- (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
- (g) all the relevant waste acceptance procedures have been completed, and
- (h) they fulfil the relevant waste acceptance criteria, and
- (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
- (j) they are wastes which have been treated, except for: 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, and
- (k) where they are wastes with a code beginning with 07 05 and 16 03, they shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture.

- 2.6.2 Stable non-reactive hazardous waste shall not be deposited in cells used or intended to be used for the disposal of biodegradable non-hazardous waste. Stable non-reactive hazardous waste and non-hazardous waste which is landfilled in the same cell must meet the relevant waste acceptance criteria.
- 2.6.3 Asbestos containing wastes and construction materials containing asbestos shall only be disposed of with other suitable wastes and not in cells containing biodegradable non-hazardous waste. Asbestos waste and construction material containing asbestos must meet the relevant waste acceptance criteria and must be covered daily and before each compaction operation with appropriate material.
- 2.6.4 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) the operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
 - (b) waste at the point of deposit;
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.6.5 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.6.6 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) the operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.6.7 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing WM/WP/06 dated November 2003.
- 2.6.8 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.
- 2.6.9 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) the operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

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

2.7 Leachate levels

2.7.1 The limits for the level of leachate listed in schedule 3 table S3.1 shall not be exceeded.

2.8 Closure and aftercare

2.8.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) the operator shall maintain a closure and aftercare management plan.

2.9 Landfill gas management

2.9.1 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) the operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:

- (a) collect landfill gas; and
- (b) control the migration of landfill gas

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 The limits in Schedule 3 shall not be exceeded.

3.1.2 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 table S3.2.

3.1.3 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) there shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.

3.1.4 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) there shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.

3.1.5 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.3 shall not be exceeded.

3.1.6 For the following activities referenced in schedule 1, table S1.1 (A1, A2, A3) the operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:

- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
- (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.

3.1.7 The limits for landfill gas arising from the installation set out in schedule 3, table S3.4 shall not be exceeded.

3.1.8 The limits for particulate matter arising from the installation set out in schedule 3, table S3.9 shall not be exceeded.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including,

but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:

- (a) Leachate specified in tables S3.1 and S3.6;
- (b) Point source emissions specified in tables S3.2;
- (c) Groundwater specified in tables S3.3 and S3.8;

- (d) Landfill gas specified in tables S3.4 and S3.5;
- (e) Surface water specified in table S3.7; and
- (f) Particulate matter specified in table S3.9.

3.5.2 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.

3.5.3 For the following activities referenced in schedule 1, table S1.1 (A1 and A2) a topographical survey of the site referenced to ordnance datum shall be carried out:

- (a) annually, and
- (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
- (c) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard and annoyance from pests;
- (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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 Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) the results of groundwater monitoring;
 - (ii) sub-surface landfill gas monitoring;
 - (iii) leachate levels, quality and quantities;
 - (iv) landfill gas generation and collection;
 - (v) waste types and quantities;

- (vi) the specification and as built drawings of the basal, sidewall and capping engineering systems.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

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

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
- (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3
- (c) the annual production/treatment set out in schedule 4 table S4.2;
- (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
- (e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
- (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
- (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment 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 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.2.5 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

- (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) 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 of them being in a partnership, dissolving the partnership.

4.3.4 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately" in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity
A1	Section 5.2 Part A (1) (a), The disposal of waste in a landfill.	Landfill for non-hazardous waste D5 –Specially engineered landfill	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in condition 2.6, as an integral part of landfilling in Phase 9 only, as shown edged in blue on drawing reference PER-03.
A2	Section 5.2 Part A (1) (a), The disposal of waste in a landfill.	Landfill for hazardous waste D5 –Specially engineered landfill	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in condition 2.6, as an integral part of landfilling in Phase 9 only, as shown edged in blue on drawing reference PER-03.
Directly Associated Activity			
A3	Water discharges to controlled waters	Discharge of site drainage from the landfill.	From surface water management system to point of entry to controlled waters (SW3 and SW4 on plan drawing WM/SW/01A).
	Description of activities for waste operations	Limits of activities	
A4	D1: Deposit into or onto land	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in condition 2.6, as an integral part of landfilling in Phases 1 to 8 and 10 only.	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The responses to questions 1.2.5, 1.2.28, 1.2.29, 1.2.30, 2.1, 2.2.6, 2.3.16, 2.3.64, 2.3.65, 2.3.66, 2.3.67, 2.3.69, 2.5.1, 2.5.3 and 4.4.4 in part B of the Application Form.	17/12/03
Document and drawings	Volume III Conceptual Model and Working Plan, sections: 2.4, 2.5, 2.6 (except in relation to drainage). 3.11, 3.13, 4.3, 4.4, 5.3, 5.4, 5.5, 5.6, 5.10, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 7.4, 7.7, 7.12, 8.4, 9.7, 9.8, 9.9, appendix 4, appendix 5, appendix 6, section 1.4 of appendix 9, section 3 of appendix 9 and section 4 of appendix 9.	17/12/03
Document and drawings	Volume II Conceptual Model and Working Plan, appendix hydrogeological risk assessment.	17/12/03

Table S1.2 Operating techniques		
Description	Parts	Date Received
Letter	The following sections of letter dated 27/10/04: Volume I, section 6, paragraphs 1,2,3,4,5 and 6; Plan drawing WM/SR/06a; Volume II, section 2, paragraph 2; Volume II, appendix 2, section 4, paragraphs 1 and 2; Volume III, section 2, paragraph 3; Volume III, section 4, paragraph 1; Volume V, section 5.	27/10/04
Document and drawings	Volume III Conceptual Model and Working Plan, appendix 8 gas monitoring plan.	08/06/05
Document and drawings	Volume II Conceptual Model and Working Plan, appendix 2 surface water monitoring plan.	29/09/05
Document and drawings	Proposed Site Investigation Report.	08/06/05
Document and drawings	Volume III conceptual Model and Working Plan, appendix 7 groundwater monitoring plan.	08/06/05
Letter	The following sections of letter dated 18/02/05: iii) Capping arrangements.	18/02/05
Letter	The following sections of letter (email) dated 07/04/05 (14:38 hours): Point number 2; Point number 4.	07/04/05
Letter	The following sections of letter dated 14/04/05: Condition 5 (monitoring boreholes); Condition 6 (drainage from quarantine and waste reception area).	14/04/05
Letter	The following sections of letter dated 13/5/05: Condition 1, point 3 (monitoring boreholes).	13/5/05
Document (Plan)	SDA/006711/03	06/05
Letter	The following sections of letter dated 11/07/05: Paragraph 2 relating to the depth of the clay basal barrier.	11/07/05
Letter	Section 3 site investigation	11/08/05
Documents	Financial provision document	11/08/05
Document	Waste Acceptance Criteria	08/06/05
Report and drawings	Final SW and Gas plans submitted 20th April 2006.	20/04/06
Report and drawings	Final GW Plan Submitted 15/06/2006	15/06/06
Dust Plan	Final Plan submitted 12/01/07	12/01/07
Variation Application EA/EPR/LP3996ND/V0 02	The responses to questions C2a, C2b, C2d, C3, C5, C6e, C7a and C7b of the variation application and the Non-Technical Summary document of the variation application.	17/11/09
Letter from Prof Stephen L Willets dated 22/12/09	Revised design of cap for Phase 9.	23/12/09

Table S1.2 Operating techniques		
Description	Parts	Date Received
Request for Further Information dated 01/04/10	The responses to questions 1, 2 and 6 of the Request for Further Information letter.	15/04/10
Additional information submitted by email	Drawings referenced: MG424/22 "Monitoring Location Plan" 053-09-081-15A "Typical Leachate Collection System Detail" 053-09-081-15A/01 "Site Plan Showing Section Locations" 053-09-081-15A/02 "Typical Liner System Sections"	07/06/10
Request for Further Information by notice dated 15/06/10	Response to questions 1b, 2 and 5	24/06/10
Variation application EPR/LP3996ND/V003	Parts C2 and C3 of the application forms and all supporting information.	08/12/14
Schedule 5 request for information EPR/LP3996ND/V003	Revised Hydrogeological Risk Assessment (HRA) Response to further questions on HRA, updated site plan, new European Waste Catalogue code tables.	12/01/15 26/01/15
Variation application EPR/LP3996ND/V003	Email detailing pre-acceptance and acceptance procedures that will be undertaken for asbestos wastes	12/05/15
Variation application EPR/LP3996ND/V006	Parts C2 and C3 of the application forms and all supporting documentation (excluding reference to the removal of the leachate drainage blanket) including the following: <ul style="list-style-type: none"> • Operating Techniques, dated April 2016 • Environmental Risk assessment, dated April 2016 • Environmental Monitoring Plan, dated April 2016 • Environmental Setting, dated April 2016 	27/04/16
Response to Schedule 5 notice dated 19/09/16	Response to questions 7, 8, 9 and 10 regarding groundwater compliance limits, leachate monitoring and asbestos monitoring.	30/09/16
Response to Schedule 5 notice dated 27/01/17	Response to question 1 regarding leachate management and drainage blanket including the following documents: <ul style="list-style-type: none"> • Document MGL/A094946/MJ/EA-03 • Drawing reference MGL/A075924/ENG/04B • Conceptual model reference MGL/A094946/HYD/04A 	08/02/17

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
1 *	The operator shall prepare and submit to the Agency for written approval a report detailing background concentrations of sulphate and cadmium in groundwater and derived trigger levels for those substances. The review shall be in accordance with the guidance provided in LFTGN01 – Hydrogeological Risk Assessment for Landfills and derivation of control and trigger levels. Once approved the trigger levels shall form part of table S4.2.	Completed
2	The operator shall submit a report in writing to the Environment Agency for approval with revised trigger levels, where appropriate, for carbon dioxide for boreholes Gas 1, 2	Completed 13/06/11

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	and 3 based on a review of existing monitoring data for these boreholes.	
3	<p>The operator shall submit written proposals to the Environment Agency for approval for in-waste landfill gas monitoring in Phase 9 in accordance with Environment Agency document LFTGN03 "Guidance on the management of landfill gas", dated September 2004, that shall include:</p> <ul style="list-style-type: none"> • A plan showing the location and reference number of the proposed in-waste monitoring points; • Details of the construction of the monitoring points; and • Timescale for the installation of the monitoring points. 	Completed 13/06/11
*This requirement is no longer necessary.		

Table S1.4 Annual waste input limits	
Category	Limit Tonnes/ Year
Inert waste	50,000
Non-hazardous waste (Phase 9 only)	50,000
Stable Non-reactive Hazardous and Asbestos Wastes (Phase 9 only)	200,000

Schedule 2 – List of permitted wastes

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)
10 01 24	sands from fluidised beds
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14	waste concrete and concrete sludge
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	glass
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil

Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste	
Waste code	Description
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 01	wastes from incineration or pyrolysis of waste
19 01 19	sands from fluidised beds
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell	
Waste code	Description
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 04*	oil fly ash and boiler dust
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 13*	fly ash from emulsified hydrocarbons used as fuel
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing dangerous substances

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell	
Waste code	Description
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 16*	fly ash from co-incineration containing dangerous substances
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 18*	wastes from gas cleaning containing dangerous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 20*	sludges from on-site effluent treatment containing dangerous substances
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 22*	aqueous sludges from boiler cleansing containing dangerous substances
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 09*	solid wastes from gas treatment containing dangerous substances
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 11*	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 12*	solid wastes from gas treatment containing dangerous substances
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 16*	waste blasting material containing hazardous substances
12 01 17	waste blasting material other than those mentioned in 12 01 16

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell	
Waste code	Description
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)
13 05	oil/water separator contents
13 05 01*	solids from grit chambers and oil/water separators
13 05 02*	sludges from oil/water separators
13 05 03*	interceptor sludges
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
13 05 08*	mixtures of wastes from grit chambers and oil/water separators
16	Wastes not otherwise specified in the list
16 03	off-specification batches and unused products
16 03 03*	inorganic wastes containing hazardous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 08	spent catalysts
16 08 02*	spent catalysts containing hazardous transition metals or hazardous transition metal compounds
16 08 07*	spent catalysts contaminated with hazardous substances
16 11	waste linings and refractories
16 11 03*	other linings and refractories from metallurgical processes containing hazardous substances
16 11 05*	linings and refractories from non-metallurgical processes containing hazardous substances
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 03	bituminous mixtures, coal tar and tarred products
17 03 01*	bituminous mixtures containing coal tar
17 03 03*	coal tar and tarred products
17 04	metals (including their alloys)
17 04 09*	metal waste contaminated with hazardous substances
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing dangerous substances
17 05 05*	dredging spoil containing dangerous substances
17 05 07*	track ballast containing dangerous substances
17 09	other construction and demolition wastes
17 09 01*	construction and demolition wastes containing mercury
17 09 02*	construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell	
Waste code	Description
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 01 05*	filter cake from gas treatment
19 01 07*	solid wastes from gas treatment
19 01 10*	spent activated carbon from flue-gas treatment
19 01 11*	bottom ash and slag containing dangerous substances
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 13*	fly ash containing dangerous substances
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 15*	boiler dust containing dangerous substances
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 17*	pyrolysis wastes containing dangerous substances
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing dangerous substances
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 03	stabilised/solidified wastes¹
19 03 04*	wastes marked as hazardous, partly ² stabilised
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 06*	wastes marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	vitrified waste and wastes from vitrification
19 04 01	vitrified waste
19 04 02*	fly ash and other flue-gas treatment wastes
19 04 03*	non-vitrified solid phase
19 08	wastes from waste water treatment plants not otherwise specified
19 08 01	screenings
19 08 02	waste from desanding

¹ Stabilisation processes change the dangerousness of the constituents in the waste and thus transform hazardous waste into non-hazardous waste. Solidification processes only change the physical state of the waste (e.g. liquid into solid) by using additives without changing the chemical properties of the waste.

² A waste is considered as partly stabilised if, after the stabilisation process, dangerous constituents which have not been changed completely into non-dangerous constituents could be released into the environment in the short, middle or long term.

Table S2.2 Permitted waste types for disposal in the stable non-reactive hazardous waste cell	
Waste code	Description
19 08 05	sludges from treatment of urban waste water
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers
19 08 08*	membrane system waste containing heavy metals
19 08 11*	sludges containing dangerous substances from biological treatment of industrial waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
19 11	wastes from oil regeneration
19 11 01*	spent filter clays
19 11 02*	acid tars
19 11 07*	wastes from flue-gas cleaning
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	glass
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing dangerous substances
19 13 03*	sludges from soil remediation containing dangerous substances
19 13 05*	sludges from groundwater remediation containing dangerous substances
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05

Table S2.3 Permitted waste types for disposal in the asbestos cell	
Waste code	Description
10	Wastes from thermal processes
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 09*	wastes from asbestos-cement manufacture containing asbestos

Table S2.3 Permitted waste types for disposal in the asbestos cell	
Waste code	Description
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances (asbestos only)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing dangerous substances (asbestos only)
17 05 07*	track ballast containing dangerous substances (asbestos only)
17 06	insulation materials and asbestos-containing construction materials
17 06 01*	insulation materials containing asbestos
17 06 05*	construction materials containing asbestos ³
17 09	other construction and demolition wastes
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances (asbestos only)
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing dangerous substances (asbestos only)

³ As far as the landfilling of waste is concerned, Member States may decide to postpone the entry into force of this entry until the establishment of appropriate measures for the treatment and disposal of waste from construction material containing asbestos. These measures are to be established according to the procedure referred to in Article 17 of Council Directive 1999/31/EC on the landfill of waste (OJ L 182, 16.7.1999, p. 1) and shall be adopted by 16 July 2002 at the latest.

Schedule 3 – Emissions and monitoring

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring method
Two leachate monitoring wells (as shown on drawing reference MG424/22)	1.0 m	Monthly	Monitoring to be carried out in accordance with Environment Agency documents LFTGN02 "Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water" unless otherwise agreed in writing with the Environment Agency.
Phase 9 – for new cells only	2.0 m at monitoring wells and 3m at the sump.	Monthly	Monitoring to be carried out in accordance with Environment Agency documents LFTGN02 "Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water" unless otherwise agreed in writing with the Environment Agency.

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
SW4 and SW3	Suspended solids	Surface Water Discharge	25 mg/l	Spot Sample	Monthly	In accordance with the LFTGN02 or as otherwise agreed in writing with the Environment Agency.
SW4 and SW3	pH	Surface Water Discharge	6-9	Spot Sample	Monthly	
SW4 and SW3	Conductivity	Surface Water Discharge	2500 µSie/cm	Spot Sample	Monthly	
SW4 and SW3	Chemical Oxygen Demand	Surface Water Discharge	77 mg/l	Spot Sample	Monthly	
SW4 and SW3	Chloride	Surface Water Discharge	200 mg/l	Spot Sample	Monthly	
SW4 and SW3	Ammonia	Surface Water Discharge	2 mg/l	Spot Sample	Monthly	
SW4 and SW3	Volume of discharge	Surface Water Discharge	3,500 m ³ /24 hour period	Spot Sample	Monthly	
SW4 and SW3	Phosphorous	Surface Water Discharge	2 mg/l	Spot Sample	Monthly	
SW4 and SW3	Oil and grease	Surface Water Discharge	Visibility	Spot Sample	Monthly	

Table S3.2 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
SW4 and SW3	Maximum discharge rate	Surface Water Discharge	130 l/s	Spot Sample	Monthly	

Table S3.3 Trigger levels for emissions into groundwater and monitoring requirements						
Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method	
GW2	Ammonia	0.5 mg/l	Spot Sample	Quarterly	In accordance with the LFTGN02 or as otherwise agreed in writing with the Environment Agency.	
GW3	Ammonia	2.260 mg/l	Spot Sample	Quarterly		
GW5	Ammonia	1.458 mg/l	Spot Sample	Quarterly		
GW7	Ammonia	1.567 mg/l	Spot Sample	Quarterly		
GW2, GW3, GW5, GW7	Chloride	250 mg/l	Spot Sample	Quarterly		
GW2, GW3, GW5, GW7,	Cadmium	1 µg/l	Spot Sample	Quarterly		
GW2 and GW8	Nickel	0.053 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Chromium	0.05 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Selenium	0.028 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Arsenic	0.13 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Lead	0.25 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Antimony	0.005 mg/l	Spot Sample	Quarterly		
GW2 and GW8	Boron	1 mg/l	Spot Sample	Quarterly		
GW1, GW8, GW9, GW10	Ammonia	0.13 mg/l	Spot Sample	Quarterly		
GW1, GW8, GW9, GW10	Chloride	165 mg/l	Spot Sample	Quarterly		
GW1, GW8, GW9, GW10	Cadmium	0.1 µg/l	Spot Sample	Quarterly		

Monitoring point Ref. /description	Parameter	Limit (including units) *	Monitoring frequency	Monitoring standard or method
Gas 1, Gas 2, Gas 3	Methane	1 %v/v	Monthly	In accordance with LFTGN03 or as otherwise agreed in writing with the Environment Agency
Gas 4	Methane	1.2 %v/v	Monthly	
Gas 5	Methane	2 %v/v	Monthly	
Gas 6	Methane	1.2 %v/v	Monthly	
Gas 7	Methane	1.1 %v/v	Monthly	
Gas 1	Carbon Dioxide	16.11 %v/v	Monthly	
Gas 2	Carbon Dioxide	6.51%v/v	Monthly	
Gas 3	Carbon Dioxide	9.09 %v/v	Monthly	
Gas 4	Carbon Dioxide	10.25 %v/v	Monthly	
Gas 5	Carbon Dioxide	2.46 %v/v	Monthly	
Gas 6	Carbon Dioxide	13.73 %v/v	Monthly	
Gas 7	Carbon Dioxide	10.2 %v/v	Monthly	

*the limits specified take account of the agreed background concentration as determined by the Environment Agency and agreed with the operator prior to tipping.

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
1 in-waste borehole per phase to be installed as set out in the Gas Monitoring Plan dated March 2006	Methane, carbon dioxide, oxygen, carbon monoxide, atmospheric pressure, differential pressure, temperature, meteorological data	Monthly	In accordance with LFTGN03 or as otherwise agreed in writing with the Environment Agency.	None
In-waste monitoring points in SNRHW Cell (Phase 9) as set out in the Landfill gas generation risk assessment (GRA)	Methane, carbon dioxide, oxygen, atmospheric pressure, differential pressure, temperature, meteorological data	Monthly	In accordance with LFTGN03 or as otherwise agreed in writing with the Environment Agency.	None
Gas 1, Gas 2, Gas 3	Oxygen, atmospheric pressure, differential pressure, temperature, meteorological data	Quarterly	In accordance with LFTGN03 or as otherwise agreed in writing with the Environment Agency.	None

Table S3.6 Leachate– other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Leachate well (as shown on drawing reference MG424/22)	pH, conductivity, alkalinity (as CaCO ₃), BOD, COD, DOC, TPH (C10 –C40), ammonia, antimony, arsenic, cadmium, calcium, chloride, chromium, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, selenium, sodium, sulphate, zinc	Monthly for 12 months, then Quarterly	In accordance with Environment Agency document LFTGN02 “Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water”, dated February 2003.	None
Leachate well (as shown on drawing reference MG424/22)	Hazardous substances	Annually		Suite in accordance with Appendices 1 and 6 of Environment Agency document LFTGN01 “Hydrogeological Risk Assessments for Landfills”, dated March 2003.
Leachate well SNRHW Cell (Phase 9) (as shown on drawing reference MGL/A075924/PER/3)	pH, conductivity, alkalinity (as CaCO ₃), BOD, COD, DOC, TPH (C10 –C40), ammonia, antimony, arsenic, boron cadmium, chloride, chromium, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, sodium, sulphate, zinc	Monthly for 12 months, then Quarterly	In accordance with Environment Agency document LFTGN02 “Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water”, dated February 2003.	None
Leachate well SNRHW Cell (Phase 9) (as shown on drawing reference MGL/A075924/PER/3)	Hazardous substances	Annually		Suite in accordance with Appendices 1 and 6 of Environment Agency document LFTGN01 “Hydrogeological Risk Assessments for Landfills”, dated March 2003.

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
SW1, SW2, SW3, SW4, SW5 and SW6	Nitrogen Sulphate	Monthly	In accordance with LFTGN02 or as otherwise agreed in writing with the Environment Agency.	None
SW1, SW2, SW5 and SW6	Suspended solids pH Conductivity Chemical oxygen demand Chloride Ammonia Volume of discharge Nitrogen Phosphorous	Monthly	In accordance with LFTGN02 or as otherwise agreed in writing with the Environment Agency.	None
SW1, SW2, SW3, SW4, SW5 and SW6	Hazardous substances	Annually	In accordance with LFTGN02 or as otherwise agreed in writing with the Environment Agency.	None

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8, GW9, GW10, GW11, GW12	Water level, Hazardous substances	Annually	In accordance with Environment Agency document LFTGN02 "Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water", dated February 2003.	Hazardous substances suite in accordance with Appendices 1 and 6 of Environment Agency document LFTGN01 "Hydrogeological Risk Assessments for Landfills" dated March 2003.
GW3, GW4, GW7	pH, conductivity, ammonia, cadmium, chloride, sulphate and zinc	Quarterly	In accordance with Environment Agency document LFTGN02 "Guidance on the Monitoring of Landfill Leachate, Groundwater	None

Table S3.8 Groundwater – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
			and Surface Water”, dated February 2003.	
GW1, GW2, GW5, GW6, GW8, GW9, GW10, GW11, GW12	pH, conductivity, alkalinity (as CaCO ₃), BOD, COD, ammonia, antimony, arsenic, boron, cadmium, calcium, chloride, chromium, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, selenium, sodium, sulphate, zinc	Monthly for 12 months then quarterly	In accordance with Environment Agency document LFTGN02 “Guidance on the Monitoring of Landfill Leachate, Groundwater and Surface Water”, dated February 2003.	None

Table S3.9 Particulate matter in ambient air - limits and monitoring requirements					
Monitoring Point Ref. /Description	Parameter	Limit (Including Unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
At four cardinal points (1.25m above ground level) around the SNRHW cell (Phase 9)	Asbestos Fibres	0.01 fibres / millilitre	During asbestos tipping over a 4 hour period.	Quarterly	In accordance with technical guidance note M17: Monitoring particulate matter in ambient air around waste facilities.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Leachate levels As required by condition 3.5.1	Two leachate monitoring wells	Every 3 months	From installation of leachate wells
Emissions to water Parameters as required by condition 3.5.1	SW4 and SW3	Every 3 months	25/06/07 or date as agreed in writing with the Environment Agency
Groundwater Parameters as required by condition 3.5.1	GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8	Every 12 months	25/06/07 or date as agreed in writing with the Environment Agency
Groundwater Parameters as required by condition 3.5.1	GW9, GW10	Every 3 months	19/08/2010
Landfill gas lateral migration Parameters as required by condition 3.5.1	Gas 1, Gas 2, Gas 3, Gas 4, Gas 5, Gas 6, Gas 7	Every 12 months	25/06/07 or date as agreed in writing with the Environment Agency for Gas 1 to Gas 3. From 19/08/10 for Gas 4 to Gas 7.
Other Landfill gas monitoring Parameters as required by condition 3.5.1	1 in-waste borehole per phase to be installed as set out in the Gas Monitoring Plan dated March 2006. Gas 1, Gas 2, Gas 3, Gas 4, Gas 5, Gas 6, Gas 7	Every 12 months	25/06/07 or date as agreed in writing with the Environment Agency
Other leachate monitoring Parameters as required by condition 3.5.1	Leachate wells	Every 3 months Every 12 months for annual parameters	From installation of leachate wells
Other surface water monitoring Parameters as required by condition 3.5.1	SW1, SW2, SW3, SW4, SW5 and SW6.	Every 3 months	25/06/07 or date as agreed in writing with the Environment Agency
Other groundwater monitoring Parameters as required by condition 3.5.1	GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8, GW9, GW10, GW11, GW12	Every 3 months	19/08/2010

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Ambient air monitoring Parameters as required by condition 3.5.1	At four cardinal points around the SNRHW cell (Phase 9)	Every 6 months	1 January, 1 June

Table S4.2 Annual production/treatment	
Leachate: Disposed of off site; Disposed of to any onsite effluent treatment plant; Recirculated into the waste mass.	Cubic metres/year
Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year

Table S4.3 Performance Parameters			
Parameter	Frequency of assessment	Annual total	Unit
Energy used (including for leachate treatment)	Annually		MWh of electricity

Table S4.4 Reporting Forms		
Media/parameter	Reporting Format	Date of Form
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	19/08/2010
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	19/08/2010
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	19/08/2010
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	19/08/2010
Waste Return	Waste Return Form RATS2E	
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	
Particulate matter	Form Particulate 1 or other reporting format to be agreed in writing with the Environment Agency	29/05/2015

Schedule 5 – Notification

This page outlines the information that the operator must provide.

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

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

Part A

Permit Number	EPR/LP3996ND
Name of operator	Mick George Limited
Location of Facility	Witcham Meadlands Landfill, Block Fen Drove, Mepal, Chatteris
	Cambridgeshire, CB6 2AY.
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit 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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be taken, to stop the emission	

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

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

Part B to be supplied as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“annually” means once every year.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

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

“Background concentration” means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

“Cell layout drawing” means:

(a) A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:

- (a) the location of the new cell on the site;
 - (b) the proposed level (Above Ordnance Datum) of the base of the excavation;
 - (c) the proposed finished levels of all containment and leachate drainage layers;
 - (d) the positions of leachate management infrastructure; and
 - (e) the positions of landfill gas infrastructure (if appropriate).
- A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:
 - (i) changes to slope length and gradient within the cell;
 - (f) new leachate or landfill gas infrastructure construction design;
 - (g) slope stability issues such as new basal excavation level; and/or
 - (h) depth of waste.

“Construction Proposals” means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the New Cell or Landfill Infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details of the New Cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliances and the solution applied;

- Any other site specific information considered relevant to proving the integrity of the New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission 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.

“Hazardous substances” as defined by the Environmental Permitting (England and Wales) Regulations 2010, SI 2010 No.675, schedule 22 and listed in our Hydrogeological risk assessment guidance, annex J to our H1 risk assessment guidance.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“Landfill Infrastructure” means any specified element of the:

- permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;
- lining within the installation.

within the site.

“Liquids” means any liquid other than leachate within the engineered landfill containment system.

“LFTGN 05” means Environment Agency Guidance for monitoring enclosed landfill gas flares.

“LFTGN 07” means Environment Agency Guidance on monitoring landfill gas surface emissions.

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

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“Medicinal product” means any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) of their predecessors under the Medicines Act 1968, section 130.

“M2” means Environment Agency Guidance Monitoring of stack emissions to air.

“New Cell” means any new cell, part of a cell or other similar new area of the site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- permanent geophysical leak location system;

- leak detection layer;
- sub-grade;
- barriers;
- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the New Cell.

“No impact” means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

“Pests” means Birds, Vermin and Insects.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Review of the Hydrogeological Risk Assessment” means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the EP Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the EP Regulations.

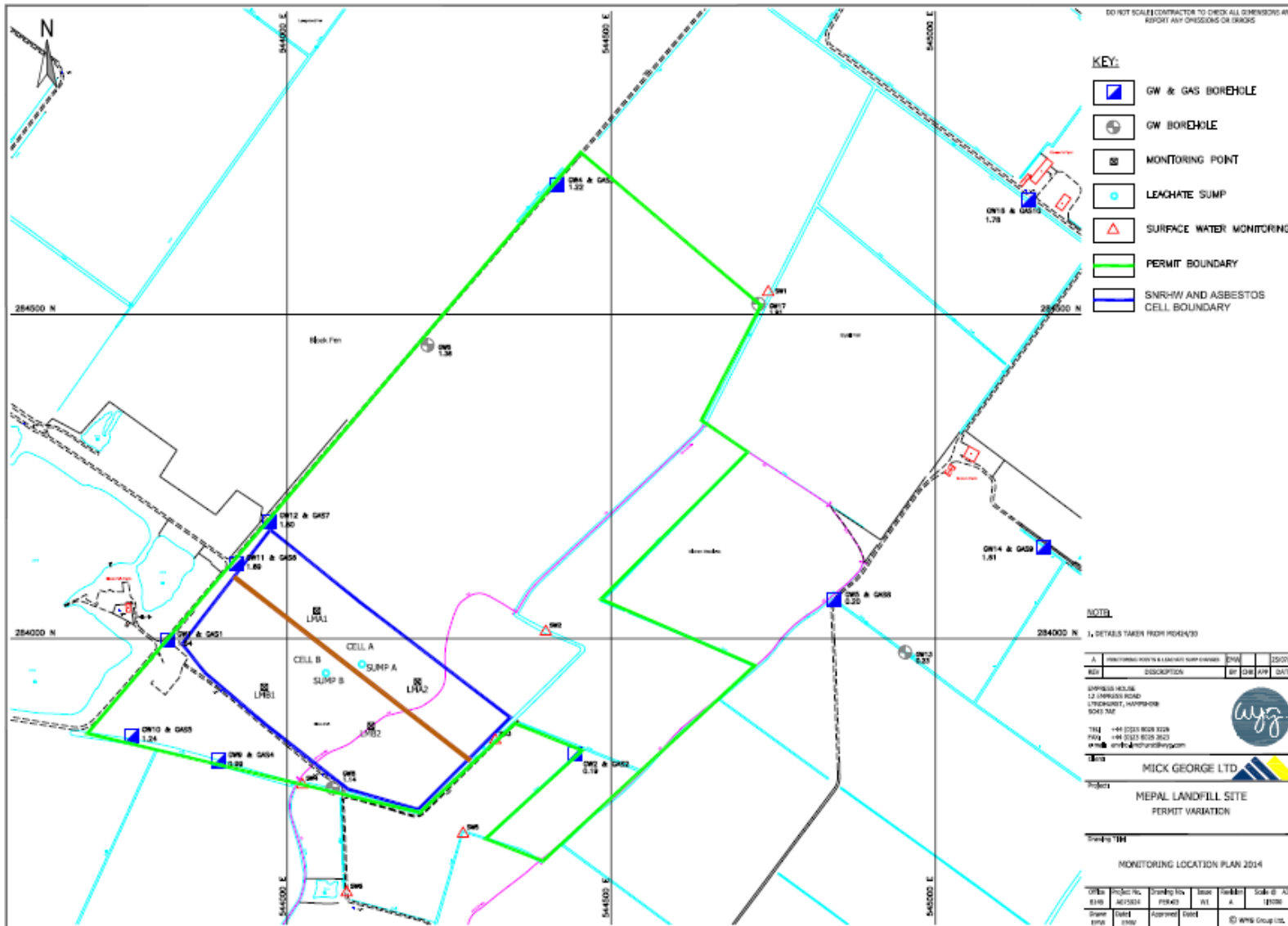
“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

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

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT

Permit number
EPR/LP3996ND