Permit

The Environmental Permitting (England and Wales) Regulations 2007

Permit

Permit number
EA/EPR/BP3790LV

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2007

Mick George Limited ("the operator")

whose registered office is

Mick George Limited
Second Drove
Meadow Lane
St Ives
Huntingdon
Cambridgeshire
PE27 4YQ

company registration number 2417831

to operate a facility comprising waste operations at

Kennett Hall Farm
Hall Farm
Dane Hill Road
Kemnott
Cambridgeshire
CB8 7QX

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27/02/09</td>
</tr>
</tbody>
</table>

M. Bischer, authorised on behalf of the Agency

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1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

(a) in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances and closure and those drawn to the attention of the operator as a result of complaints; and

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.1.4 The operator shall comply with the requirements of an approved competence scheme or shall hold an appropriate certificate of technical competence or other approval issued by the Agency.

1.2 Accident management plan

1.2.1 The operator shall:

(a) maintain and implement an accident management plan;

(b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;

(c) make any appropriate changes to the plan identified by a review.

1.3 Finance

1.3.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Agency dated 27/02/09 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Agency.

1.3.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

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

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

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

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

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

(b) If notified by the Agency that the activities are giving rise to pollution, the operator shall submit to the Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the 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 Agency.

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

2.5 Pre-operational conditions

2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

2.6 Landfill Engineering

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

2.6.2 The construction of a new cell shall take place only in accordance with the approved construction proposals unless:

(a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or

(b) a change has otherwise been agreed in writing by the Agency.

2.6.3 The operator shall submit a CQA Validation Report to the Agency as soon as practicable following the construction of the new cell.
2.6.4  No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Agency has confirmed that it is satisfied with the construction proposals.

2.6.5  The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:

(a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or

(b) a change has otherwise been agreed in writing by the Agency.

2.6.6  The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.

2.6.7  Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.4 and 2.6.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Agency as soon as practicable.

2.6.8  For the purposes of conditions 2.6.1 and 2.6.4, the Agency shall be deemed to be satisfied where it has not, within the period of 4 weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:

(a) confirmed whether or not it is satisfied; or

(b) informed the operator that it requires further information.

2.7  Waste acceptance

2.7.1  Wastes shall only be accepted for disposal if:

(a) they are listed in schedule 3, and

(b) they are inert waste, and

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

(d) all the relevant waste acceptance procedures have been completed, and

(e) they fulfill the relevant waste acceptance criteria, and

(f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and

(g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.

2.7.2  The operator shall visually inspect:

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

(b) waste at the point of deposit;

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

2.7.3  Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
2.7.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.

2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing ESI11.

2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.

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

2.8 Closure and aftercare

2.8.1 The operator shall maintain a closure and aftercare management plan.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land.

3.2 Fugitive emissions of substances

3.2.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including those specified in any approved fugitive emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 Mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise, the mud.

3.2.3 Mud arising from the activities shall be cleared from affected areas outside the Site as soon as practicable.

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

3.3 Odour

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

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

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring and any other actions for the parameters specified in the following tables in schedule 4 to this permit:

(a) Groundwater specified in table S4.1;
(b) Landfill Gas specified in table S4.2;
(c) Surface water specified in table S4.3.

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 A topographical survey of the site referenced to Ordnance Datum shall be carried out:

(a) annually, or prior to the disposal of waste in any new cell or new development area of the landfill whichever is the shorter period, and

(b) following closure of the landfill or part of the landfill.

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

4 Information

4.1 Records

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

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

(i) the results of groundwater monitoring;
(ii) landfill gas monitoring;
(iii) waste types and quantities;
4.1.2 All records, plans and the management system required to be maintained by this permit shall be held on the site.

4.2 Reporting

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

(a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;

(b) the topographical surveys required by condition 3.5.1 other than those submitted as part of a CQA validation report;

(c) 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;

(d) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;

(e) 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 Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 5 table S5.1;

(b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.3; 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 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 4 years, submit to the Agency, within 8 months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.6 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency.
4.3 Notifications

4.3.1 The Agency shall be notified without delay following the detection of:
   (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
   (b) the breach of a limit specified in the permit; or
   (c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.

4.3.3 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.

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

   Where the operator is a registered company:
   (a) any change in the operator’s trading name, registered name or registered office address; 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:
   (a) any change in the operator’s name or address; and
   (b) any steps taken with a view to the dissolution of the operator.

In any other case:
   (a) the death of any of the named operators (where the operator consists of more than one named individual);
   (b) any change in the operator’s name(s) or address(es); and
   (c) 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.

4.3.5 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 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 7 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 ‘without delay’, in which case it may be provided by telephone.
# Schedule 1 - Operations

## Table 5.1.1 Activities

<table>
<thead>
<tr>
<th>Description of activities for waste operations</th>
<th>Limits of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1: Deposit into or on to land</td>
<td>Receipt, handling, storage and disposal of inert wastes consisting of waste types as specified in Table 3.1, as an integral part of landfilling.</td>
</tr>
</tbody>
</table>

## Table 5.1.2 Operating techniques

<table>
<thead>
<tr>
<th>Description</th>
<th>Parts</th>
<th>Date Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>All</td>
<td>03/07/08</td>
</tr>
</tbody>
</table>

## Table 5.1.3 Improvement programme requirements

<table>
<thead>
<tr>
<th>Reference</th>
<th>Requirement</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The operator shall submit a revised landfill gas management and monitoring plan for the written agreement of the Agency. The revised landfill gas management and monitoring plan shall be in accordance with the Agency guidance document LEFGN03. The revised monitoring plan shall include proposals for in-waste landfill gas monitoring boreholes and monitoring there from.</td>
<td>22/05/09</td>
</tr>
</tbody>
</table>
Table S1.4 Pre-operational measures

<table>
<thead>
<tr>
<th>Reference</th>
<th>Pre-operational measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The operator shall install 3 down gradient groundwater boreholes (KHF01, KHF02, and KHF03) as shown on Drawing No ESD 11 and to a design to be agreed in writing by the Agency. The groundwater monitoring boreholes shall be constructed and recorded in accordance with a Construction Quality Assurance Plan covering all elements of the groundwater monitoring system. The operator shall provide to the Agency a CQA report that includes details of the following: • an as built drawing for and CQA of the groundwater monitoring boreholes; • an as built location plan for the groundwater monitoring boreholes.</td>
</tr>
<tr>
<td>2</td>
<td>At least 4 weeks prior to the commencement of construction of any new area for disposal the operator shall submit 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 for this area. The artificially established barrier shall be constructed to achieve an appropriate travel time based on a minimum thickness of 7m with the material placed at a maximum permeability of $1 \times 10^{-7} \text{m.s}^{-1}$, or equivalent hydraulic performance standard. The thickness of the barrier shall not at any time be less than 500mm. The material used to construct the barrier shall not contain any substance at a concentration that would result in a discharge to groundwater of a List I substance at a discernible concentration, or a discharge of a List II substance that would result in pollution of groundwater. Construction shall not commence until it has been confirmed in writing by the Agency that the proposals are in conformance with the above specifications.</td>
</tr>
<tr>
<td>3</td>
<td>Prior to the placement of any waste within the engineered facility, the operator shall review the available groundwater monitoring data from existing boreholes to determine baseline conditions. A report including the available data sets and setting trigger levels for groundwater shall be submitted to the Environment Agency. Derivation of trigger levels will be undertaken using recognised statistical analysis and the Agency’s ‘Hydrogeological Risk Assessments for Landfills and the derivation of groundwater control and trigger levels’ (LTFGN01).</td>
</tr>
</tbody>
</table>

Table S1.5 Annual Waste Input Limits

<table>
<thead>
<tr>
<th>Category</th>
<th>Limit Tonnes / Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inert Waste</td>
<td>300,000</td>
</tr>
</tbody>
</table>
### Schedule 3 - Waste types, raw materials and fuels

#### Table S3.1 Wastes that may be accepted without testing

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Description</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 11 03</td>
<td>Waste glass-based fibrous materials</td>
<td>Only without organic binders</td>
</tr>
<tr>
<td>15 01 07</td>
<td>Glass packaging</td>
<td></td>
</tr>
<tr>
<td>17 01 01</td>
<td>Concrete</td>
<td>Selected C&amp;D waste only[6]</td>
</tr>
<tr>
<td>17 01 02</td>
<td>Bricks</td>
<td>Selected C&amp;D waste only[6]</td>
</tr>
<tr>
<td>17 01 03</td>
<td>Tiles and ceramics</td>
<td>Selected C&amp;D waste only[6]</td>
</tr>
<tr>
<td>17 01 07</td>
<td>Mixtures of concrete, bricks, tiles and ceramics</td>
<td>Selected C&amp;D waste only[6]</td>
</tr>
<tr>
<td>17 02 02</td>
<td>Glass</td>
<td></td>
</tr>
<tr>
<td>17 05 04</td>
<td>Soil and stones other than those mentioned in 17 05 03</td>
<td>Excluding topsoil, peat; excluding soil and stones from contaminated sites</td>
</tr>
<tr>
<td>19 12 05</td>
<td>Glass</td>
<td>Separately collected glass only</td>
</tr>
<tr>
<td>20 01 02</td>
<td>Glass</td>
<td></td>
</tr>
<tr>
<td>20 02 02</td>
<td>Soils and stones</td>
<td>Only from garden and parks; waste; excluding top soil, peat</td>
</tr>
</tbody>
</table>

[6]Selected construction and demolition waste (C&D waste): with low contents of other types of materials (like metals, plastic, organics, wood, rubber etc). The origin of the waste must be known. No C&D waste from constructions, polluted with inorganic or organic dangerous substances e.g. because of production processes in the construction, soil pollution, storage and usage of pesticides or other dangerous substances etc., unless it is made clear that the demolished construction was not significantly polluted.

No C&D waste from constructions, treated, covered or painted with materials, containing dangerous substances in significant amounts.

#### Table S3.2 Wastes that may be accepted subject to testing

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 01 02</td>
<td>Wastes from mineral non-metaliferous excavation</td>
</tr>
<tr>
<td>01 04 08</td>
<td>waste gravel and crushed rocks other than those mentioned in 01 04 07</td>
</tr>
<tr>
<td>01 04 09</td>
<td>waste sand and clays</td>
</tr>
<tr>
<td>10 11 12</td>
<td>Waste glass other than those mentioned in 10 11 11</td>
</tr>
<tr>
<td>10 12 08</td>
<td>Waste ceramics, bricks, tiles and construction products (after thermal processing)</td>
</tr>
<tr>
<td>10 13 14</td>
<td>Waste concrete and sludge</td>
</tr>
<tr>
<td>19 12 09</td>
<td>Minerals (for example sand, stones)</td>
</tr>
<tr>
<td>20 02 03</td>
<td>Other non-biodegradable wastes</td>
</tr>
</tbody>
</table>
### Schedule 4 – Emissions and monitoring

#### Table S4.1 Groundwater monitoring requirements

<table>
<thead>
<tr>
<th>Location or description of point of measurement</th>
<th>Parameter</th>
<th>Monitoring frequency</th>
<th>Monitoring standard or method</th>
<th>Other specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH01, BH05, K02BH10, K02BH11 (upgradient), KHF01, KHF02, KHF03 (down gradient) as shown on Drawing Ref. ESID11)</td>
<td>Groundwater level</td>
<td>Quarterly</td>
<td>As specified in Agency Guidance LFTGN02 Monitoring of Landfill Leachate, Groundwater and Surface Water, or otherwise agreed in writing with the Agency</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>pH</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Conductivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zinc</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Copper</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Nickel</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Chromium</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Lead</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Arsenic</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Ammonia</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Chloride</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Alkalinity</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Manganese</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Iron</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Sulphate</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Potassium</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Sodium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Magnesium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOD</td>
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<tr>
<td></td>
<td>DOC</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calcium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cadmium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table S4.2 Landfill Gas monitoring requirements

<table>
<thead>
<tr>
<th>Location or description of point of measurement</th>
<th>Parameter</th>
<th>Monitoring frequency</th>
<th>Monitoring standard or method</th>
<th>Other specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>All in-waste landfill gas monitoring boreholes</td>
<td>Methane</td>
<td>Quarterly</td>
<td>As specified in Agency Guidance LFTGN03 Management of Landfill Gas, or as otherwise agreed in writing with the Agency</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Carbon Dioxide</td>
<td>following installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oxygen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Atmospheric pressure</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location or description of point of measurement</td>
<td>Parameter</td>
<td>Monitoring frequency</td>
<td>Monitoring standard or method</td>
<td>Other specifications</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------</td>
<td>----------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Flow attenuation pond</td>
<td>Ammonia</td>
<td>Quarterly</td>
<td>As specified in Agency Guidance LFGN02 Monitoring of Landfill Leachate, Groundwater and Surface Water, or otherwise agreed in writing with the Agency.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Chloride</td>
<td>from commencement of discharge to flow attenuation on pond.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Schedule 5 - Reporting

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

<table>
<thead>
<tr>
<th>Table S5.1: Reporting of monitoring data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Emission or monitoring point/reference</td>
</tr>
<tr>
<td>Groundwater Parameters as required by condition 3.5.1</td>
<td>BH01, BH05, KO2BH110, KO2BH111 (upgradient), KH002, KH003 (down gradient) as shown on Drawing Ref. ESID111</td>
</tr>
<tr>
<td>Landfill gas Parameters as required by condition 3.5.1</td>
<td>All in-waste landfill gas boreholes</td>
</tr>
<tr>
<td>Surface water monitoring Parameters as required by condition 3.5.1</td>
<td>SW1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table S5.2: Reporting forms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Media/parameter</td>
<td>Reporting format</td>
</tr>
<tr>
<td>Surface water</td>
<td>Form surface water 1 or other form as agreed in writing by the Agency</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Form groundwater 1 or other form as agreed in writing by the Agency</td>
</tr>
<tr>
<td>Landfill Gas</td>
<td>Form landfill gas 1 or other form as agreed in writing by the Agency</td>
</tr>
<tr>
<td>Waste Return</td>
<td>Waste Return Form RATS2E</td>
</tr>
<tr>
<td>Landfill topographical surveys and interpretation</td>
<td>Reporting format to be agreed in writing with the Agency</td>
</tr>
</tbody>
</table>
Schedule 6 - Notification

These pages outline the information that the operator must provide.

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

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

### Part A

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>EPR/BP3790LV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of operator</td>
<td>Mick George Limited</td>
</tr>
<tr>
<td>Location of Facility</td>
<td>Kennett Hall Farm</td>
</tr>
<tr>
<td>Time and date of the detection</td>
<td></td>
</tr>
</tbody>
</table>

#### (a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection

| Date and time of the event | |
| Reference or description of the location of the event | |
| Description of where any release into the environment took place | |
| Substances(s) potentially released | |
| Best estimate of the quantity or rate of release of substances | |
| Measures taken, or intended to be taken, to stop any emission | |
| Description of the failure or accident | |

#### (b) Notification requirements for the breach of a limit

To be notified within 24 hours of detection unless otherwise specified below

| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value and uncertainty | |
| Date and time of monitoring | |
| Measures taken, or intended to be taken, to stop the emission | |
### Time periods for notification following detection of a breach of a limit

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Notification period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

### (c) Notification requirements for the detection of any significant adverse environmental effect

To be notified within 24 hours of detection:

<table>
<thead>
<tr>
<th>Description of where the effect on the environment was detected</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Substances(s) detected</td>
<td></td>
</tr>
<tr>
<td>Concentrations of substances detected</td>
<td></td>
</tr>
<tr>
<td>Date of monitoring/sampling</td>
<td></td>
</tr>
</tbody>
</table>

### Part B - to be submitted as soon as practicable

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

| Name* |  |
| Post  |  |
| Signature |  |
| Date  |  |

*authorised to sign on behalf of Mick George Limited*
Schedule 7 - Interpretation

"Construction Proposals":
- for new cells, means written information at a level of detail appropriate to the complexity and pollution risk; on stability assessment (where relevant) and the construction quality assurance (CQA) programmes in relation to the new cell.
- for landfill infrastructure, means the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the 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-compliance 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.

"Landfill Infrastructure" means any specified element of the:
- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- within the Site.

"Liquids" means any liquid other than leachate within the landfill.

"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;
- sub-grade;
- artificially established geological barriers;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;
- for the new cell.

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

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 the limit.

END OF PERMIT
Permit Number: EPR/BP3790L/A001  Operator: Mick George Limited
Facility: Kennett Hall Farm Landfill  Form Number: Surface Water 1 / DD/MM/YYYY

**Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY to DD/MM/YYYY**

<table>
<thead>
<tr>
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</tbody>
</table>

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum − maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .............................................  Date: .........................

(Authorised to sign as representative of Operator)

---

Permit Number: EPR/BP3790LV  Page 20  Date of issue: 27/02/09
Permit Number: EPR/BP3790LV/A001  
Operator: Mick George Limited  
Facility: Kennett Hall Farm Landfill  
Form Number: Groundwater1 / DD/MM/YY

Reporting of groundwater monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

<table>
<thead>
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</tbody>
</table>

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the ‘minimum – maximum’ measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed: .................................................................  
(Authorised to sign as representative of Operator)  
Date.................................................................

Permit Number/EPR/BP3790LV  
Page 21  
Date of issue 27/02/08
Permit Number: EPR/BP3790LV/A001
Operator: Mick George Limited
Facility: Kennett Hall Farm Landfill
Form Number: LFG1 / DD/MM/YYYY

Reporting of landfill gas monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

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</tr>
</tbody>
</table>

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the ‘minimum – maximum’ measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated; e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed

(Authorised to sign as representative of Operator)

Date

Permit Number EPR/BP3790LV Page 22 Date of issue 27/02/09
Environment Agency Permitting decisions

We have decided to grant the permit for Kennett Hall Farm Landfill, to be operated by Mick George Limited.

The permit number is EPR/BP3790LV.

The operator is Mick George Limited.

The facility is located at Hall Farm, Kennett, Cambridgeshire, CB8 7QX

The decision was effective from 27/02/09.

Summary of the decision

We have decided to grant a permit for the operator, subject to the conditions in the permit.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environment protection is provided.

The Site

The main features of the facility are as follows. The facility is an inert landfill. It is located 0.5km north-west of Kennett in Cambridgeshire, at National Grid Reference TL 692 690. The towns of Newmarket and Bury St Edmunds are located about 6.5km to the south-west and 14km to the south-east of the facility respectively.

The facility is bounded to the west by Tumpike Road (B1085), from which site access is to be provided. To the north is agricultural land and a karting facility, from which it is separated by a 4 to 6m high soil storage mound. Immediately to the south are two former landfill sites and unrestored quarry workings. To the east is agricultural land.

Phases 1A and 1B of the landfill will extend over areas of about 7.0 ha and 4.5 ha, respectively. It is considered that the deposition of inert waste material in these areas will take place over the course of about 7 years, following the extraction of the mineral reserves.

The uppermost geological unit underlying the facility will be Upper Cretaceous Middle Chalk Formation. The groundwater receptor beneath the facility will be Middle Chalk Formation.

The closest designated site to the facility is Red Lodge Heath Site of Special Scientific Interest (SSSI), located 0.6km to the north-north-east. The SSSI is a mosaic of dry acid grassland, chalk grassland, lichen heath and wet woodland.
ponds. There are no Special Areas of Conservation or Special Protection Areas within 2km of the facility.
Purpose of this document

This decision document:
- explains how the applicant’s application has been determined;
- provides a record of the decision-making process;
- shows how all relevant factors have been taken into account; and
- justifies the specific conditions in the permit.

Unless the decision document specifies otherwise we have accepted the applicant’s proposals.

Structure of this document

- Key Issues of the decision;
- Annex 1 the decision check list;
- Annex 2 the consultation responses.
"Duly made" check on Application received
The Application was determined to be duly made as submitted on 19th June 2008.

Consultation on the Application
We sent copies of the Application to the following statutory consultees in accordance with the EPR Regulations on 12th December 2008:

- Cambridgeshire County Council
- East Cambridgeshire District Council
- Cambridgeshire Primary Care Trust
- Food Standards Agency.

Consideration of consultation responses
Responses were received from the following statutory and non-statutory consultees:

- Cambridgeshire County Council
- East Cambridgeshire District Council
- Cambridgeshire Primary Care Trust
- Food Standards Agency.

No responses were received from members of the public during the determination period.

We have considered all responses in determining the Application. The ways in which material responses have been taken into account are summarised in Annex 2 to this document.

Further information requirements
The Application was deemed duly made, but further information was required to enable us to determine the Application. Further information was requested from the Applicant by email as follows:

A request for information email was sent on 21st November 2008 to request further clarification of some aspects of the Stability Risk Assessment. A response was received from the Applicant on 24th November 2008. A further email request for information was sent on 11th December 2008, in order to clarify points in the Stability Risk Assessment. A response was received on 18th December 2008. These were placed on the public register and have been taken into consideration by us in making our determination. They have been referenced within the permit.
Key Issues of the decision

Environmental risk
The main environmental risks from the facility are particulate matter and noise.

The risk of particulate matter escaping beyond the site boundary is predicted to be a low to medium risk in the Nuisance and Health Risk Assessment submitted as part of the application. Mitigation measures will be in place, which will include dampening the site with a bowser when required and keeping the drop height to a minimum for materials being unloaded. The operator has submitted a Dust Action Plan as part of the application detailing risks, control measures, emissions monitoring, site management techniques and complaints procedure. This will ensure that any generated dust will be controlled to within acceptable levels. As such, the standard template condition for fugitive emissions is considered to be satisfactory.

Site activities have the potential to give rise to noise, for example vehicles using the site, reversing alarms and operation of mobile plant. The risk of noise-causing nuisance is identified as being a low to medium risk in the Nuisance and Health Risk Assessment. Control measures have been considered in the context of the facility’s setting, the proximity of receptors and the proposed operations to be carried out. The operator has implemented a Noise Management Plan and the standard template condition for noise is considered to be satisfactory.

The operator has submitted a Stability Risk Assessment and shown the site to be stable with appropriate factors of safety.

Conservation
Red Lodge Heath SSSI is located 600m to the north-east of the facility. It is a mosaic of dry acid grassland, chalk grassland, lichen heath and wet woodland with ponds. It supports a nationally important assemblage of invertebrates including an important population of the rare five-banded tailed digger wasp Cerberis quinquefasciata. It also supports populations of rare plants.

The operator has assessed risk to the SSSI in the Nuisance and Health Risk Assessment and has considered the potential effects of noise, particulate matter and mud. Particulate matter presents a low to medium risk, and measures will be in place as described above to mitigate this. It is considered that the SSSI will not be impacted by the operation of Kennett Hall Farm Landfill. As such, it is considered that the standard template condition for fugitive emissions is satisfactory.

We have completed a CROW assessment for Red Lodge SSSI and our considered opinion that the site will not impact on the SSSI has been ratified by Natural England.
Groundwater

Groundwater locally may have been impacted through the presence of the former landfill sites hydraulically up gradient of the facility and through past mineral extraction operations in the area.

A hydrogeological risk assessment has been submitted and modelling undertaken to demonstrate that groundwater beneath the facility will not be impacted.

The applicant has however submitted a hydrogeological risk assessment in support of the application. Considering the detail contained within this and the application documents, it is considered that the local geology cannot be relied upon to provide sufficient attenuation required under the Landfill Directive. For this reason it is considered that an artificial geological barrier is required. For inert waste landfills, paragraph 3 (4) states that this barrier shall consist of a mineral layer one metre thick with a maximum permeability of 1x10^-7 m/s. Improvement Condition 2 has been imposed to require the operator to provide detailed design, material specifications and the construction quality assurance (CQA) programme for the pre-operational engineering of an artificially established geological barrier equivalent to this standard. The thickness of the barrier shall at no time be less than 500mm.

Without such a barrier the groundwater will not be sufficiently protected. Furthermore, the planning permission for the site requires a geological engineered barrier. This requirement replicates the planning condition but has been included to ensure adequate measures are in place for groundwater protection.

There will be upstream and downstream groundwater monitoring boreholes to monitor groundwater quality around the landfill in accordance with the Landfill Directive. Downstream groundwater monitoring boreholes have not yet been constructed. Therefore pre-operational condition 1 has been included to ensure downstream groundwater boreholes are installed.

Control and trigger levels must be derived from monitoring data obtained from all existing up-gradient boreholes (i.e. the data presented in ESID Appendix H). Whilst sufficient data has been collected, no limits were proposed by the operator. Under pre-operational condition 3 the operator is required to derive control and trigger levels for down-gradient boreholes and submit these to us before they are incorporated into the permit. The operator is required to supply these limits based on statistical analysis for our agreement before this condition can be considered discharged.

Operational techniques

Operational techniques for managing accidents have been adequately addressed.
Due to the inert nature of the waste accepted at the site, litter, pest infestation and odour are not expected to occur and therefore will not require active management. Noise and dust will be adequately managed.

We are satisfied the operator will have operational techniques in place to operate the site and prevent site operations from impacting on the environment.

**Monitoring and compliance**

We have included improvement conditions and pre-operational conditions in Tables S1.3 and S1.4 respectively.

Where appropriate we have inserted monitoring tables for groundwater, surface water and landfill gas.

**Surface water**

The operator has proposed a closed surface water management system whereby surface water from the restored raised landform is channelled to a flow attenuation pond in the south eastern corner of the site. It is assumed, in the interest of the pond never reaching full capacity, that water from this pond soaks to groundwater. This creates an indirect discharge to groundwater. As such, once the landfill is completed and the site is restored, it will be important to monitor the quality of the water entering the flow attenuation pond to protect the groundwater. However, until then there will be no surface water monitoring infrastructure and therefore no requirement for a surface water management plan.

**Groundwater**

Control and trigger levels must be derived from monitoring data obtained from all existing boreholes. Whilst sufficient data has been collected, no limits were proposed by the operator. Under pre-operational condition 3 the operator is required to derive control and trigger levels and submit these to us. The operator is required to supply proposed limits, based on statistical analysis, for our agreement before this condition can be considered discharged.

**Landfill gas**

The operator has not proposed any in-waste landfill gas monitoring infrastructure, only perimeter monitoring in groundwater monitoring boreholes. With an inert landfill site it is important to monitor for the presence of landfill gas in the waste rather than at the perimeter, as it should not be present. LFTG03 Guidance on the Management of Landfill Gas (Environment Agency, 2004) states that monitoring of gas within the waste body will normally be required at inert waste landfills. Should landfill gas be detected in-waste then the monitoring regime should be extended to include monitoring around the perimeter. Under Improvement Condition 1, the operator is required to produce a revised management and monitoring plan for landfill gas to include in-waste gas monitoring boreholes. This is a precautionary
measure as inert waste that meets waste acceptance criteria for inert landfill sites should not generate landfill gas.

**Operator**
We are satisfied the operator is a legal entity and will have day to day control over the facility.

The site is not a multi-operator facility.

**Fit and Proper Persons**
The Applicant has been able to demonstrate that it is a Fit and Proper Person to carry out the Specified Waste Management Activity that is part of the permitted activities at the installation. The considerations taken into account were:

The site management hold the appropriate level of WAMITAB Certificate of Technical Competence (Managing Landfill Operations – Non-Hazardous Waste (LS4)) and can be considered competent.

Financial provision has been secured through a Deed of Trust and ESCROW.

The operator has not declared any relevant convictions. The National Enforcement Database has been checked to confirm this. There are no relevant convictions.

**The Facility**
Phases 1A and 1B of the landfill will extend over areas of about 7.0 ha and 4.5 ha, respectively. It is considered that the deposition of inert waste material in these areas will take place over the course of about 7 years, following the extraction of the mineral reserves.
## Annex 1: Decision Checklist

<table>
<thead>
<tr>
<th>Activity</th>
<th>Justification/Detail</th>
<th>Determination criteria met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receipt of submission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application fee:</td>
<td>The application fee is correct</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Change Table reference T3 A (C) (IV)</td>
<td></td>
</tr>
<tr>
<td>Commercial confidentiality</td>
<td>The operator has not made a claim for commercial confidentiality. We have not received any information in relation to this application that appears to be confidential in relation to any party.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td></td>
<td></td>
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<tr>
<td>Scope of consultation:</td>
<td>The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, and our Public Participation Statement. The application is not considered to be a site of high public interest and therefore a draft decision has not been advertised under the Public Participation Directive prior to issue.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>The consultation took place on 16 December 2005 and comprised providing copies of the application to statutory consultees listed elsewhere in this decision document.</td>
<td></td>
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<tr>
<td>Consultation responses:</td>
<td>The consultation responses (Annex 2) were taken into account in the decision.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Description</strong></td>
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<tr>
<td>Control of the facility:</td>
<td>We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.</td>
<td>Yes</td>
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<tr>
<td><strong>Applicable Directives</strong></td>
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<tr>
<td><strong>Planning</strong></td>
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<tr>
<td>Extent of the site of the facility:</td>
<td>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit at Schedule 2, and the operator is required to carry on the permitted activities within the site boundary.</td>
<td>Yes</td>
</tr>
<tr>
<td>Planning permission:</td>
<td>We are satisfied that planning permission is in place and it is appropriate for the relevant waste operation applied for. Planning permission reference E/2007/08/C/M.</td>
<td>Yes</td>
</tr>
<tr>
<td>Site condition report:</td>
<td>A site condition report is not required for landfill.</td>
<td>n/a</td>
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<tr>
<td><strong>Environmental risk and operating techniques</strong></td>
<td></td>
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<tr>
<td>Environmental risk:</td>
<td>We have reviewed the operator’s assessment of the environmental risk from the facility. The risk assessment was considered to be a satisfactory assessment and no further assessment was required. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant.</td>
<td>Yes</td>
</tr>
<tr>
<td>Operating techniques:</td>
<td>We have reviewed the techniques used by the operator and compared these with the relevant guidance note -</td>
<td>Yes</td>
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<td></td>
<td>- LFTG02 Guidance of Monitoring of Landfill Leachate, Groundwater and Surface Water</td>
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<td>- LFTG03 Guidance on the Management of Landfill Gas</td>
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<tr>
<td>Procedure:</td>
<td>Procedures are in place to ensure only the permitted wastes are accepted into the facility.</td>
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<td>Vehicles will be netted/sheeted as required.</td>
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<td>Site roads will be maintained, kept clean and dampened down in dry weather.</td>
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<td>The proposed techniques / emission levels for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility.</td>
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<tr>
<td><strong>Use of conditions</strong></td>
<td>The permit contains many conditions taken from our permit template. We</td>
<td>Yes</td>
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<tr>
<td>Activity</td>
<td>Justification / Detail</td>
<td>Determination criteria met</td>
</tr>
<tr>
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<tr>
<td>other than those from the template</td>
<td>developed these conditions in consultation with industry having regard to the relevant legislation. This decision document does not include an explanation for these usual conditions. Where such conditions are imposed we have considered the application and accepted the details are sufficient and satisfactory to control that aspect of the operation. Based upon the information submitted in the application, we are not fully satisfied: That appropriate measures are in place in the event of elevated gas levels within the waste. Improvement Condition 1 requires the submission of a revised landfill gas monitoring action plan within 3 months to address the requirement for in-waste gas monitoring boreholes and monitoring there from.</td>
<td>No Yes</td>
</tr>
<tr>
<td>Waste types</td>
<td>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility in tables C3.1 and C3.2. We are satisfied that the operator can accept these waste for the following reasons: All wastes will either be inert as defined in the Landfill Directive or will be tested to demonstrate they meet the strict acceptance criteria for inert landfill sites.</td>
<td>✔</td>
</tr>
<tr>
<td>Pre-operational conditions</td>
<td>Based on the information in the application, we consider that we need to impose the following pre-operational conditions. Justification for these conditions is provided in the main body of the decision document: The operator shall install 3 down gradient groundwater boreholes (KHF01, KHF02 and KHF03) as shown on Drawing No ESID 11 and to the design agreed in writing by the Agency. The groundwater monitoring boreholes shall be constructed and recorded in accordance with a Construction Quality Assurance Plan covering all elements of the groundwater monitoring system. The operator shall provide to the Agency a CQA report that includes details of the following: an as built drawing for and CQA of the groundwater monitoring boreholes; an as built location plan for the groundwater monitoring boreholes.</td>
<td>✔</td>
</tr>
</tbody>
</table>

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 for that part and it has been confirmed in writing by the Agency that these are in conformance with the following specifications. The artificially established barrier shall be constructed to achieve an appropriate travel time based on a minimum thickness of 1m with the material placed at a maximum permeability of 1x10⁻⁷ m s⁻¹, or equivalent hydraulic performance standard. The thickness of the barrier shall at no time be less than 500mm. The material used to construct the barrier shall not contain any substance at a concentration that would result in a discharge to groundwater of a List I substance at a discernible concentration, or a discharge of a List II substance that would result in pollution of groundwater.

Prior to the placement of any waste within the engineered facility, the operator shall review the available groundwater monitoring data to determine baseline...
<table>
<thead>
<tr>
<th>Activity</th>
<th>Justification / Detail</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>conditions. A report including the available data sets and setting trigger levels for groundwater shall be submitted to the Environment Agency. Derivation of trigger levels will be undertaken using recognised statistical analysis and the Agency's 'Hydrogeological Risk Assessments for Landfills and the derivation of groundwater control and trigger levels' (LFTGN01).</td>
<td>No</td>
</tr>
<tr>
<td>Incorporating the application</td>
<td>We have specified that the applicant must operate his facility in accordance with the following descriptions in his application. Application form Environmental Setting and Installation Design Report Hydrogeological Risk Assessment Report Stability Risk Assessment Report Landfill Gas Risk Assessment Report Nuisance and Health Risk Assessment Report Drawing ESID11</td>
<td>Yes</td>
</tr>
<tr>
<td>Emission limits</td>
<td>No substances have been identified as being emitted in significant quantities. ELVs or equivalent parameters have been set for these substances however the permit requires trigger levels to be derived for groundwater monitoring boreholes in accordance with Environment Agency guidance on Hydrogeological Risk Assessment to check that there is no discernible emission of list I substances nor any pollution by list II substances. Trigger levels will be derived from data previously collected from existing boreholes.</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitoring</td>
<td>We have decided that monitoring should be carried out for the parameters listed in tables S4.1, S4.2 and S4.3 in schedule 4 using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to ensure that there is no pollution to surface or groundwater as a result of activities on site. We made these decisions in accordance with LFTGN02. Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water. No limits have been set as limits will be determined through compliance with the pre-operational conditions and the improvement programme. Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.</td>
<td>Yes</td>
</tr>
<tr>
<td>Reporting</td>
<td>We have specified reporting as specified in Schedule 5 for the following reasons. To allow us to review the control measures at the site and instigate changes to operational techniques where these are required to prevent pollution. We made these decisions in accordance with our guidance on the management of landfill gas, and &quot;Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water.&quot;</td>
<td>Yes</td>
</tr>
<tr>
<td>Technical competence</td>
<td>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence. The technically competent manager for the site holds an appropriate level of Certificate of Technical Competence.</td>
<td>Yes</td>
</tr>
<tr>
<td>Relevant Convictions</td>
<td>The National Enforcement Database has been checked to ensure that no relevant convictions have been declared. The operator satisfies the criteria in RGN 5 on Operator Competence. No relevant convictions.</td>
<td>Yes</td>
</tr>
<tr>
<td>Activity</td>
<td>Justification / Detail</td>
<td>Determination criteria met</td>
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</tr>
<tr>
<td>Financial provision</td>
<td>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence. The financial provision arrangements have satisfied the financial provisions criteria.</td>
<td>Yes</td>
</tr>
<tr>
<td>Opera Score</td>
<td>The Opera score is 57. The Opera score has not changed from that set out in the application.</td>
<td></td>
</tr>
</tbody>
</table>
Annex 2: consultation responses

Advertising and consultation

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

<table>
<thead>
<tr>
<th>Response received from</th>
<th>Food Standards Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief summary of issues raised</td>
<td>Provided the operator complies with the technical guidance it is unlikely that there will be any unacceptable effects on the human food chain.</td>
</tr>
<tr>
<td>Summary of actions taken or show how this has been covered</td>
<td>Impose standard conditions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response received from</th>
<th>Cambridgeshire Primary Care Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief summary of issues raised</td>
<td>Provided the operational techniques represent Best Available Techniques (BAT) and noise and dust levels are acceptable there should not be a risk to public health.</td>
</tr>
<tr>
<td>Summary of actions taken or show how this has been covered</td>
<td>Impose standard conditions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response received from</th>
<th>Cambridgeshire County Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief summary of issues raised</td>
<td>Confirmed revisions to the planning permission and the revised planning permission reference. Highlighted the previous EA objection to the planning application which was only withdrawn when a condition requiring a geological engineered barrier was included in the draft planning permission.</td>
</tr>
<tr>
<td>Summary of actions taken or show how this has been covered</td>
<td>Pre-operational condition 2 has been included requiring the operator to submit details of a geologically engineered barrier. This is in accordance with the planning permission for the site.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response received from</th>
<th>East Cambridgeshire District Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief summary of issues raised</td>
<td>Air quality: raised concern over vehicle numbers and the impact on air quality from lorry movements. Stated that an Air Quality Impact Assessment is needed for such additional vehicle numbers. Contaminated land: raised concern over the risk to groundwater from existing landfills in the immediate vicinity of the site and would not want any new landfill to worsen groundwater quality.</td>
</tr>
<tr>
<td>Summary of actions taken or show how this has been covered</td>
<td>Air quality: this is an issue that should have been considered by Cambridgeshire County Council in their determination of the planning application. It is not appropriate for such an assessment to be requested or assessed by the EA in this instance. Contaminated land: Pre-operational condition 2 has been included requiring the operator to submit details of a geologically engineered barrier. This is in accordance with the planning permission for the site.</td>
</tr>
</tbody>
</table>

| Response received from | Operator on first draft of permit (December 2008) |
Brief summary of issues raised

You have elected to issue the permit as if it was for an 'installation'. We think, with respect, this is not right in as much as 'installation' is defined in the 2007 Regulations (at Regulation 2) by reference to the 'activities' set out in Schedule 1 of Part 1: the activity relevant to landfilling waste is at Section 5.2 and this clearly states 'but excluding disposals in a landfill taking only inert waste'—which is the very case at Kennett. Therefore, we believe the permit should be issued for a 'waste operation' pursuant to Regulation 8(1)(d).

Condition 4.1.1 requires records to be kept for 5 years unless otherwise agreed. We hereby seek your acknowledgement of and agreement to the fact that waste Transfer Notes are only needed to be kept for 2 years pursuant to the Environment Protection (Duty of Care) Regulations 1991: this has been accepted in other permits and upheld at Appeal.

Table S1.3 (improvement programme) requires submission of management and monitoring plans for both surface water and for landfill gas. You will note from our Application that Sections 2.4 and 2.5 concluded from our technical modelling work using methods approved by the Environment Agency that neither such plans are required. Please, therefore, would you kindly explain your demands in these respects.

Table S1.4 sets out pre-operational measures and stipulates a 12-month set of baseline or background monitoring data from the three new, down-gradient boreholes. With respect—and for all the technical reasons included within Sections 2.2, 2.3 and 3.4 and the HRA of the Application—we believe such a monitoring exercise will prove nothing worthwhile. There is a phenomenal amount of groundwater quality monitoring data from within the site itself and its immediate surroundings and the three proposed, additional boreholes are simply there to provide "fill-in" data and not background data—as if we had none. This precedent has been accepted at other sites—for example my Client's site at Rushston in Northamptonshire—and we see no reason why the same should not apply at Kennett.

Schedule 3 to the permit lists, at Tables S3.1 and S3.2, those wastes authorised for disposal at the site: this does not reflect the same wastes as in the Application. Why have 10.11.12, 10.12.06, 10.13.14, 19.12.09 and 20.02.03 been omitted? They seem perfectly innocuous to us.

Summary of actions taken or show how this has been covered

The permit has been amended. "Installation" now reads "waste operations". But being a waste operation as opposed to an installation makes no material difference. Landfill is defined in EPR by reference to the LFD definition which includes inert sites. EP Reg 35 applies schedule 10 to landfills. Schedule 10 then applies Article 8 which means the landfill needs to comply with the LFD including the annexes.

The permit condition makes provision for other storage arrangements to be made by agreement in writing with the Agency. Proposals can be made on a case by case basis and any agreements should be made by the regulatory officer for the site, it is therefore not appropriate for such an agreement to be made at this stage as an existing mechanism for negotiation is provided.

Surface Water

The Schedule 1, Table S1.3 reference to the surface water management and monitoring plan has been deleted, as there will be no active surface water management system during the operational phase. Table S4.3 'Surface water monitoring requirements' has been amended to require surface water monitoring following restoration. Table S4.3 requires that the discharge to the flow attenuation pond (which will not commence until the site is restored) will be monitored quarterly for ammonia, and chloride. The monitoring frequency and parameters are based on Waste Management Paper No 26A Landfill Completion, Table 3.2 "Determinands and Monitoring Frequencies for Surface Waters, Leachates and Landfill Gas at Site Completion Phase". As this is effectively the discharge from the surface water ditch to soakaway, pH, electrical conductivity, dissolved oxygen and COD are not included in the monitoring suite.

Landfill Gas

The application proposes peripheral monitoring and only one in-waste borehole, over 11 hectares of landfill. WMP4 specifies that there is a requirement to monitor the waste.
Accordingly, Improvement Condition 2 has been set, in order that the operator provides a
management plan and monitoring schedule for landfill gas which includes in-waste monitoring.
We have removed the requirement for additional groundwater monitoring data to be collected
although a modified version of the condition has been retained as control and trigger levels
must to be submitted to the EA for approval.
These waste types have been added into Table S3.2 “Waste that may be accepted subject to
testing”.

Response received from
Operator on second draft

Brief summary of issues raised

Table S1.3 (improvement programme requirements). With respect to surface water, there is
no active surface water management infrastructure proposed for the site and no discharge
proposed to surface water; as a result, it is considered that a surface water management and
monitoring plan is unnecessary. Furthermore, a surface water monitoring point (SW1) is also
identified in Table S4.3; in the light of the previous comment, I do not understand why this is
required (or indeed, where it is supposed to be located). I would request, therefore, that this
requirement to monitor surface water is also removed.

With respect to landfill gas, the LFGR A identifies that negligible quantities of landfill gas will be
generated (the site is to accept inert waste) and thus no formal gas management infrastructure
is required – this is the convention for inert sites. The LFGR A quotes (its Para 3.2.2) research
produced by the Environment Agency to identify that in-waste gas monitoring boreholes are
inappropriate for landfill sites accepting low permeability inorganic wastes (the report deals
mainly with sites accepting hazardous wastes, so one can conclude that they [in-waste gas
monitoring boreholes] are even less appropriate for sites accepting similar types of inert
wastes, where landfill gas generation, by definition, must be negligible); I cannot understand,
therefore, why the Agency is insisting that in-waste monitoring boreholes are provided and are
used as the ONLY means of monitoring landfill gas (Table S4.2). It is considered that the
proposals in the LFGR A to use boreholes around the perimeter of the facility is much more
appropriate. In the light of these comments and the identification of a proposed landfill gas
monitoring regime within the LFGR A and Operations, Control and Monitoring Plan (OCMP), it is
considered that a landfill gas management and monitoring plan is unnecessary.

Table S1.4 (pre-operational measures). Condition 2 requests that trigger levels are derived
before the facility becomes operational. The relevant groundwater compliance points are the
downgradient monitoring boreholes that will be installed on the facility’s boundary as part of the
development of the facility. In these circumstances, it is common practice to use a 12 month
data set in order to derive appropriate control and trigger levels (as recommended in the HRA);
this is of particular relevance in this setting, where there are identified sources of impact to
groundwater quality up gradient of the facility. The 12 month data set to be used to derive the
control and trigger levels can be collected whilst the facility is operational, as has been the case
at numerous sites across the Country (including Mick George’s existing sites at Meal –
Witcham Meadlands and Rushton). I would request, therefore, that Condition 2 is removed and
replaced by an improvement condition requesting that trigger levels be derived for the new
down gradient monitoring boreholes (KHFO1, KHFO2, KHFO3) and be submitted to the
Environment Agency within 15 months of the facility becoming operational.

Condition 3 requires detailed design, material specifications and the construction quality
assurance (CQA) programme for the pre-operational engineering of the artificially established
geological barrier to be submitted to the Agency. Prof. Willetts has already confirmed to you
that our Application outlines why an engineered barrier (liner) is not required at the facility.
In particular, the HRA demonstrates that no liner is required for the site in order to protect
groundwater (why should it? By definition, the inert waste to be accepted at the facility has the
following properties (amongst others) “The total leachability and pollutant content and the
ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any
surface water or groundwater') - the procedures used in the HRA to reach this conclusion are
consistent with the approach outlined in the Environment Agency's document: 'Guidance on
the permitting of the deposit of inert waste on land — Final Draft' (EPR S5.02.1), May 2008.
Further justification is also provided in the Environmental Setting and Installation Design
report. I do not understand, therefore, what justification the Agency can have for including a
requirement to provide a liner and would request that this condition is removed.

Summary of actions taken or show how this has been covered

Table 1.3 Improvement Programme requirements. The Schedule 1, Table S1.3 reference to
the surface water management and monitoring plan has been deleted, as there will be no
active surface water management system during the operational phase. Table S4.3 'Surface
water monitoring requirements' has been amended to require surface water monitoring
following restoration. Table S4.3 requires that the discharge to the flow attenuation pond (which
will commence until the site is restored) will be monitored quarterly for ammonia and
chloride. The monitoring frequency and parameters are based on Waste Management Paper
No 26A Landfill Completion, Table 3.2 "Determinands and Monitoring Frequencies for Surface
Waters, Leachates and Landfill Gas at Site Completion Phase". As this is effectively the
discharge from the surface water ditch to soakaway, pH, electrical conductivity, dissolved
oxygen and COD are not included in the monitoring suite.

We have included a requirement for the submission of a revised landfill gas management and
monitoring plan, to incorporate the need for in-waste gas monitoring boreholes and monitoring
thereof (as stated in LFTGN 03 Guidance on the Management of Landfill Gas) (note that the
original application included a landfill gas management and monitoring plan, but did not specify
in-waste boreholes and monitoring thereof).

Groundwater monitoring results and groundwater levels are included in the Environmental
Permit Application, Table S1.4 'Pre-operational measures,' Reference 1 includes a requirement
that the operator installs 3 down gradient groundwater boreholes. Reference 3 states that prior
to the placement of any waste within the engineered facility, that operator shall review the
available groundwater monitoring data from the existing boreholes to determine baseline
conditions and set trigger levels.

Table S1.4 (pre-operational measures) The Environmental Permit has been amended to
include a geological barrier, as required by the Landfill Directive. Schedule 1, Table S1.4 'Pre-
operational measures', Reference 2 includes the requirement for an artificially established
barrier equivalent to a thickness and permeability of 1m at 1 x 10⁻⁷m/sec. The artificially
established barrier shall be at least 500mm thick.

Response received from
Environment Agency Area

Brief summary of issues raised
Artificially established geological barrier (AEGB): In view of continuing objections from the
Operator, Area staff were seeking confirmation that this requirement would be retained.

Prior Investigation and Requisite Surveillance: With regard to groundwater monitoring and
surface water management infrastructure, Area staff were seeking confirmation regarding what
has been done and what remains to be done (i.e. what can and cannot be regulated by the
Pre-operational, Operational, and/or Improvement Programme conditions within the Permit).

Landfill Engineering: With regard to surface water management (post-restoration), Area staff
were concerned that measures should be taken to ensure that the engineering of any surface
water management infrastructure (i.e. ditches) did not interfere with the integrity and
effectiveness of the engineering of the adjacent, closed, landfill (formerly operated by WRG).
Summary of actions taken or show how this has been covered

The Environmental Permit has been amended to include a geological barrier, as required by the Landfill Directive. Schedule 1, Table S1.4 'Pre-operational measures', Reference 2 includes the requirement for an artificially established barrier equivalent to a thickness and permeability of 1m at 1 x 10⁻⁹ m/sec. The artificially established barrier shall be at least 500mm thick.

Schedule 1, Table S1.4 has been amended to state that the design of the groundwater monitoring boreholes is to be agreed in writing by the Agency.

The Schedule 1, Table S1.3 reference to the surface water management and monitoring plan has been deleted, as there will be no active surface water management system during the operational phase. Table S4.3 'Surface water monitoring requirements' has been amended to require surface water monitoring following restoration. Table S4.3 requires that the discharge to the flow attenuation pond (which will not commence until the site is restored) will be monitored quarterly for ammonia and chloride. The monitoring frequency and parameters are based on Waste Management Paper No 26A Landfill Completion, Table 3.2 "Determine and Monitoring Frequencies for Surface Waters, Leachates and Landfill Gas at Site Completion Phase". As this is effectively the discharge from the surface water ditch to soakaway, pH, electrical conductivity, dissolved oxygen and COD are not included in the monitoring suite.

Groundwater monitoring results and groundwater levels are included in the Environmental Permit Application. Table S1.4 'Pre-operational measures,' Reference 1 includes a requirement that the operator installs 3 down gradient groundwater boreholes. Reference 3 states that prior to the placement of any waste within the engineered facility, that operator shall review the available groundwater monitoring data from the existing boreholes to determine baseline conditions and set trigger levels.