



# Permit with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

---

Sewells Reservoir Construction Limited

SRC Martells Quarry  
Slough Lane  
Ardleigh  
Essex  
CO7 7RU

**Permit number**

**EPR/BP3334YQ**

# **SRC Martells Quarry**

## **Permit number EPR/BP3334YQ**

### **Introductory note**

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

The main features of the permit are as follows:

The SRC Martells Quarry landfill is located at Ardleigh, Essex, approximately 6.5 km to the north-east of Colchester and 18 km south-west of Ipswich, in a largely rural area. The site is bound by the wider quarry and historic landfill sites to the north and east, with agricultural land to the south and west. The nearest residential receptor, Slough Farm, is located adjacent to the south-west boundary of the site. Whilst farm outbuildings are located immediately adjacent to the site boundary, the farm house is located some 70 m away. Ardleigh Gravel Pit SSSI is located 220 m to the north and 320 m to the north-east of the site as two distinct unconnected areas.

The site is currently being quarried for sand and gravel from the Kesgrave Thames Deposits. Upon completion of quarrying the site will be restored through the importation of inert waste and selected non-hazardous wastes. The landfill has three cells. Cell 1 is permitted to accept non-degradable, non-hazardous wastes consisting mainly of pre-treated soils. Cells 2 and 3 will be filled using inert wastes only. The permitted activity falls under Section 5.2 Part A(1)(a) of Schedule 1 of the Environmental Permitting (England & Wales) Regulations 2016, The disposal of waste in a landfill.

The local geology comprises sand and gravel which is underlain by London Clay. The sand and gravel is a Secondary A Aquifer and the London Clay is classed as unproductive strata. The site is not located within a groundwater Source Protection Zone. With the dewatering activities taking place currently within the quarry, groundwater flow direction is towards the landfill from all sides. When the liner is in place and dewatering is no longer required, groundwater flow direction will revert to the baseline scenario i.e. from south-east to north-west.

The base and side walls of the cells will be engineered in accordance with the Landfill Directive. Cell 1 will be capped and leachate and landfill gas monitoring boreholes installed. Leachate levels in Cell 1 will be maintained below the level of the aquifer. This will be possible as the cells will be excavated into a considerable depth of London Clay. Active leachate extraction or gas management will not be required in Cells 2 and 3 as all wastes will have a low potential to generate leachate or landfill gas. Infilling will take place over a period of 15-20 years. Once completed the site will be restored to pre-quarrying contours and reinstated to agricultural use.

The site operations have the potential to cause dust and noise emissions but proposed mitigation measures and good operational procedures will ensure that these emissions are minimised and not causing pollution beyond the site boundary. The site's water management system includes two large ponds to the north which accommodate the dewatering operation for the active quarry. Any surplus water is discharged into the principal watercourse, Spring Valley under a separate authorisation. During final restoration of the landfill a network of land drains will be installed leading to the irrigation lagoon at the southwest corner of the site.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/BP3334YQ	Duly made 05/03/18	Application for non-hazardous landfill.
Additional information received	22/06/18	Submission of permit EPR/FP3801KH to show current surface water monitoring requirements within the wider quarry area.
	10/07/18	Schedule 5 Notice response containing information relating to HRA.
	12/07/18	Schedule 5 Notice response containing Leachate and Surface Water Management Plans.
	24/07/18	Schedule 5 Notice response containing Dust and Noise Management Plans and Landfill Gas Risk Assessment.
	07/09/18	Revised Dust, Leachate and Surface Water Management Plans, Waste Acceptance Procedures (WAP), Monitoring and Extraction Point Plan (MEPP), and Pre-settlement contour plan.
	19/09/18	Updated Dust Management Plan.
	21/09/18	Revised Surface Water and Leachate Management Plans and Waste Acceptance Procedure (WAP) for Cell 1.
		16/10/18
Permit determined EPR/BP3334YQ (Billing ref.: BP3334YQ)	24/10/18	Permit issued to Sewells Reservoir Construction Limited.

End of introductory note

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/BP3334YQ**

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

**Sewells Reservoir Construction Limited** (“the operator”),

whose registered office is

**Lodge B Highwood Quarry**

**Little Canfield**

**Great Dunmow**

**Essex**

**CM6 1SL**

company registration number 02349942

to operate an installation at

**SRC Martells Quarry**

**Slough Lane**

**Ardleigh**

**Essex**

**CO7 7RU**

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

Name	Date
David Griffiths	24/10/2018

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 24/10/2018 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.
- 1.2.1 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 1.2.1; and
  - (c) the estimated costs for the closure and aftercare of the landfill.

### 1.3 Energy efficiency

- 1.3.1 The operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) Review and record at least every 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 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 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 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 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 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 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 within four weeks of the completion of the construction of the relevant landfill infrastructure, or other time period agreed in writing with the Environment Agency.
- 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 Wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 2, tables S2.1 and S2.2; and
  - (b) they are non- hazardous waste; 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.
- 2.6.2 Wastes shall only be accepted for restoration where:
- (a) they are listed in schedule 2, table S2.3; and
  - (b) they are accepted in accordance with a restoration plan approved in writing by the Environment Agency.
- 2.6.3 The operator shall:
- (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill and waste at the point of deposit; and
  - (b) be satisfied that the waste conforms to the requirements of condition 2.6.1.
- 2.6.4 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.
- 2.6.5 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.6.6 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing No. M13.227(d).D.003 dated August 2018.
- 2.6.7 The quantity of waste that is deposited or recovered in the landfill in any year shall not exceed the limits in schedule 1, table S1.4.
- 2.6.8 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.

## **2.7 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 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 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, tables S3.2.



- 3.1.3 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.4 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
  - (a) between nine and six months prior to the fourth anniversary of the granting of the permit; and
  - (b) between nine and six months prior to every subsequent six years after the fourth anniversary of the granting of the permit.

## **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.

## **3.5 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 S3.7;
  - (b) Groundwater specified in tables S3.2 and S3.5;
  - (c) Landfill gas specified in tables S3.3, S3.4 and S3.6; and
  - (d) Surface water specified in table S3.8.
- 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 and shall be used to produce a plan of a scale adequate to show the surveyed features of the site:
- (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.

### **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 or 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; and
  - (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 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 ('the annual report') shall be submitted to the Environment Agency by 31st January each year or such other date as may be agreed in writing by the Agency, with the exception of 4.2.2(c) that must be provided by the end of February 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. The review will include written descriptions of the improvements made to operational performance during the year, action plans developed and planned improvements for the coming year;
- (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;
  - (h) a plan(s) ('the monitoring and extraction point plan – MEPP') showing the locations of existing and any new leachate and landfill gas extraction and monitoring points.
- 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) using the forms specified in schedule 4, table S4.4 or other reporting format as agreed in writing with the Environment Agency; 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 In the event:
- (a) 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) 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) 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:

- (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.

4.3.4 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

<b>Table S1.1 activities</b>				
<b>Activity reference</b>	<b>WFD Annex I and II operations (where applicable)</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
A1	D5 – Specially engineered landfill R10 – Land treatment resulting in benefit to agriculture or ecology	Section 5.2 Part A(1)(a), The disposal of waste in a landfill.	Landfill for non-hazardous waste and landfill restoration	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.7, as an integral part of landfilling.  Only inert wastes listed in Table S2.2 shall be deposited in Cells 2 and 3 as shown on the site plan at Schedule 7.
<b>Directly Associated Activities</b>				
A2	N/A	-	Temporary storage of leachate in a sump	Leachate arising from the landfill Cell 1.
A3	D6 – release to water body except seas/oceans	-	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/BP3334YQ	Sections 3.31 to 3.65 and 4.7 to 4.71 of the Conceptual Site Model, Environmental Setting and Site Design Report.	05/03/18
Response to Schedule 5 Notice dated 26/06/18	Landfill gas management plan, Section 4 of Landfill Gas Risk Assessment dated July 2018	24/07/18
Response to request for further information dated 05/07/18	Noise Management Plan, dated July 2018	24/07/18

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Response to request for further information dated 24/08/18	Monitoring and Extraction Point Plan (MEPP) drawing M13.227(d).D.004, dated August 2018 Waste Acceptance Procedure (WAP) for Cells 2&3, dated September 2018	07/09/18
Response to request for further information dated 19/09/18	Surface Water Management Plan, dated September 2018 Leachate Management Plan, dated September 2018 Waste Acceptance Procedure (WAP) for Cell 1, dated September 2018	21/09/18
	Dust Management Plan, dated October 2018	16/10/18

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
1	The operator shall collect carbon dioxide monitoring data for a period of 12 months at a frequency of once every month in gas perimeter boreholes GM97/01, GM97/02, GM97/03, GM97/04, GM97/05, GM97/06, GM97/07, GW97/01, BH1, BH3, BH4, BH5 as identified on Drawing No. 17 604/004_0 Rev.03 dated 02/02/2018.	24/10/2019
2	Following the completion of Improvement Requirement 1, the operator shall submit a report in writing for Environment Agency approval. The report shall detail the findings of a review of background perimeter carbon dioxide data, with proposals and justification for carbon dioxide action levels and action plans in accordance with the ICoP methodology as referenced in Table S3.4 of the permit.	24/01/2020

<b>Table S1.4 Annual waste input limits</b>	
<b>Category</b>	<b>Limit Tonnes/ Year</b>
Non-hazardous waste including inert waste	100,000
<b>Total</b>	100,000

## Schedule 2 – List of permitted wastes

<b>Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste – Cell 1</b>	
<b>Waste code</b>	<b>Description</b>
<b>10</b>	<b>Wastes from thermal processes</b>
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 01	slags from primary and secondary production
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
10 06 01	slags from primary and secondary production
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 01	slags from primary and secondary production
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
10 11 03	waste glass-based fibrous materials
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 14	waste concrete and concrete sludge
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 07	glass packaging
<b>17</b>	<b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>
<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
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
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 02	glass
<b>17 03</b>	<b>bituminous mixtures, coal tar and tarred products</b>
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
<b>19</b>	<b>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</b>
<b>19 03</b>	<b>stabilised/solidified wastes</b>
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 07	solidified wastes other than those mentioned in 19 03 06



<b>Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste – Cell 1</b>	
<b>Waste code</b>	<b>Description</b>
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 05	glass
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
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 02	glass
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 02	soil and stones

<b>Table S2.2 Permitted waste types for disposal at a landfill for non-hazardous waste – Inert waste (Cells 2 and 3)</b>	
<b>Waste code</b>	<b>Description</b>
<b>10</b>	<b>Wastes from thermal processes</b>
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
10 11 03	waste glass-based fibrous materials
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 07	glass packaging
<b>17</b>	<b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>
<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
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
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 02	glass
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	soil and stones other than those mentioned in 17 05 03
<b>19</b>	<b>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</b>

<b>Table S2.2 Permitted waste types for disposal at a landfill for non-hazardous waste – Inert waste (Cells 2 and 3)</b>	
<b>Waste code</b>	<b>Description</b>
19 12 05	glass
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 02	glass
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 02	soil and stones

<b>Table S2.3 Permitted waste types for restoration</b>	
<b>Waste code</b>	<b>Description</b>
Agreed in accordance with the Restoration Plan approved under condition 2.6.2	

## Schedule 3 – Emissions and monitoring

<b>Table S3.1 Leachate level limits and monitoring requirements</b>			
<b>Monitoring point reference/ Description</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring standard and method</b>
<b>Operational Cells or Phases</b> (Any cells or phases that do not have a final engineered cap agreed in accordance with the landfill engineering condition, <b>2.5</b> )			
Leachate compliance and monitoring points L&LG1-18, L&LG2-18 Shown on the Plan MEPP Drawing No. M13.227(d).D.004 dated, August 2018	25 mAOD	Quarterly	As specified in Environment Agency Guidance LFTGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed with the Agency as part of a leachate monitoring plan.
<b>Non Operational Cells or Phases</b> (Any cells or phases that have a final engineered cap agreed in accordance with the landfill engineering condition, <b>2.5</b> )			
-	-	-	-

<b>Table S3.2 Groundwater – emission limits and monitoring requirements</b>					
<b>Monitoring point reference<sup>(1)(2)</sup></b>	<b>Parameter</b>	<b>Limit<sup>(2)</sup> (including unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
BH3	Chloride	90 mg/l	Spot Sample	Quarterly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u><a href="http://www.gov.uk">risk assessments for your environmental permit (www.gov.uk)</a></u> or such other subsequent guidance as may be agreed in writing with the Environment Agency
	Potassium	7.4 mg/l			
	Cadmium	0.32 µg/l			
Nickel	74 µg/l				
Benzene	1 µg/l				
BH4	Chloride	123 mg/l			
	Potassium	10.6 mg/l			
	Cadmium	0.23 µg/l			
	Nickel	21 µg/l			
GW97-01	Benzene	1 µg/l			
	Chloride	67 mg/l			
	Potassium	14 mg/l			
	Cadmium	0.23 µg/l			
	Nickel	74 µg/l			

(1) As shown on the Plan MEPP Drawing No. M13.227(d).D.004 dated, August 2018

(2) Once dewatering has stopped and groundwater flow direction reverts back, the groundwater monitoring requirements are subject to a review. The exact time of the review is determined based on the annual monitoring reviews.

<b>Table S3.3 Landfill gas in external monitoring boreholes – limits and monitoring requirements</b>				
<b>Monitoring point Ref. /description</b>	<b>Parameter</b>	<b>Limit (including units)</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
GM97/01, GM97/03, GM97/06, GW97/01, BH1, BH3, BH4, BH5 identified on Plan MEPP Drawing No. M13.227(d).D.004 dated August 2018	Methane	1 %v/v	Quarterly	As specified in Environment Agency Guidance LFTGN03 (September 2004), or such other subsequent guidance as may be agreed in writing with the Environment Agency. Record whether the ground is: waterlogged frozen snow covered
	Carbon Dioxide	no limit*		
	Oxygen	no limit		
	Atmospheric pressure	no limit		
	Differential pressure	no limit		
* Action levels and action plan to be determined in accordance with the Improvement Requirements 1 and 2.				

<b>Table S3.4 Landfill gas emissions from capped surfaces for Cell 1 that accepted non-hazardous waste – monitoring requirements</b>			
<b>Monitoring point Ref. /description</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring Standard or method</b>
Permanently capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Temporarily capped zone	Methane concentration	Every 12 months	As per LFTGN 07 (v2 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
Uncapped areas	Methane concentration	Every 12 months	As agreed with the Environment Agency based on the wording of revised LFTGN 07 or landfill sector guidance or such other subsequent guidance as may be agreed in writing with the Environment Agency.

**Table S3.5 Groundwater – other monitoring requirements**

<b>Monitoring Point Ref. /Description</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
Up gradient MEPP	Water level, Ammoniacal Nitrogen, Chloride, Electrical Conductivity, pH	Quarterly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> or such other subsequent guidance as may be agreed in writing with the Environment Agency
	Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Annually	
	Hazardous substances	Annually for first six years of operation	
Down or cross gradient MEPP	Water level, Ammoniacal Nitrogen, Chloride, Electrical Conductivity, pH	Quarterly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> or such other subsequent guidance as may be agreed in writing with the Environment Agency
	Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Annually	
	Hazardous substances	Annually for first six years of operation then every two years	
MEPP	Base of monitoring point (mAOD)	Annually	

<b>Table S3.6 Landfill gas – other monitoring requirements</b>				
<b>Monitoring Point Ref. /Description</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
In waste gas monitoring boreholes	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Quarterly	Calibrated handheld monitoring instrument	<p>For cells or phases which have no active gas extraction.</p> <p>Gas extraction system shall be installed and extraction commenced once monitoring shows onset of methane production in waste at a rate that can be sustainably extracted.</p> <p>Once gas extraction has commenced in a particular cell or phase, there is no longer a requirement to carry out this monitoring.</p>

<b>Table S3.7 Leachate – other monitoring requirements</b>				
<b>Monitoring point reference or description</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
<b>Operational Cells or Phases</b> <b>(Any cell or phases that do not have a final engineered cap agreed in accordance with condition 2.5)</b>				
MEPP	Ammoniacal Nitrogen, Arsenic, BOD, Cadmium, Calcium, Chloride, Chromium, COD, Copper, Electrical Conductivity, Iron, Lead, Magnesium, Manganese, Nickel, pH, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Quarterly	At leachate compliance points as listed in table S3.1.	None
MEPP	Hazardous substances	Annually	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> , or such other subsequent guidance as may be agreed in writing with the Environment Agency	
MEPP	Depth to base (mAOD)	Annually		
<b>Non Operational Cells or Phases</b> <b>(Any cell or phases that have a final engineered cap agreed in accordance with condition 2.5)</b>				
MEPP	Ammoniacal Nitrogen, Arsenic, BOD, Cadmium, Calcium, Chloride, Chromium, COD, Copper, Electrical Conductivity, Iron, Lead, Magnesium, Manganese, Nickel, pH, Potassium, Sodium, Total Alkalinity, Total Sulphates, Zinc	Annually	At leachate compliance points as listed in table S3.1.	None
MEPP	Hazardous substances	Once every four years	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> , or such other subsequent guidance as may be agreed in writing with the Environment Agency	
MEPP	Depth to base (mAOD)	Annually		



<b>Table S3.8 Surface water – other monitoring requirements</b>				
<b>Monitoring Point Ref. /Description</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
MEPP	Ammoniacal Nitrogen Chloride Electrical conductivity pH Suspended solids Visual Oil and Grease	Quarterly*	Spot sample	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (<a href="http://www.gov.uk">www.gov.uk</a>)</u> or such other subsequent guidance as may be agreed in writing with the Environment Agency.
* Once the land drains have been installed on a restored landform.				

# Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>		
<b>Parameter</b>	<b>Reporting period</b>	<b>Period ends</b>
Leachate level As specified by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December
Emission to groundwater As specified by schedule 3, table S3.2	Every 3 months	31 March, 30 June, 30 September, 31 December
Landfill gas in external monitoring boreholes As specified by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December
Emission of landfill gas from capped surfaces As specified by schedule 3, table S3.4	Every 12 months	31 December
Other groundwater monitoring As specified by schedule 3, table S3.5	Every 3 months	31 March, 30 June, 30 September, 31 December
Other Landfill gas monitoring As specified by schedule 3, table S3.6	Every 3 months	31 March, 30 June, 30 September, 31 December
Trace gas monitoring	Every 12 months	31 December
Other leachate monitoring As specified by schedule 3, table S3.7	Every 12 months	31 December
Other surface water monitoring As specified by schedule 3, table S3.8	Every 12 months	31 December
Meteorological data Landfill Directive, annex III, section 2	Every 12 months	31 December

\* - where the reporting period is 12 months, you may submit this information as part of the 'annual report' required by condition 4.2.2.

<b>Table S4.2: Annual production/treatment</b>	
Leachate: Disposed of off site	Cubic metres/year

<b>Table S4.3 Performance Parameters</b>			
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Annual total</b>	<b>Unit</b>
Energy used	Annually		MWh of electricity or natural gas

<b>Table S4.4 Reporting Forms</b>		
<b>Media/parameter</b>	<b>Reporting Format</b>	<b>Date of Form</b>
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	24/10/18
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	24/10/18
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	24/10/18
Waste Return	E-waste Return Form	-
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	24/10/18

# 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	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any incident or accident which significantly affects or may significantly affect the environment</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

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

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements 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</b>	
<b>To be notified within 24 hours of detection</b>	
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.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* 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:
  - (i) the location of the new cell on the site;
  - (ii) the proposed level (Above Ordnance Datum) of the base of the excavation;
  - (iii) the proposed finished levels of all containment and leachate drainage layers;
  - (iv) the positions of leachate management infrastructure; and
  - (v) the positions of landfill gas infrastructure (if appropriate).
- (b) 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;
  - (ii) new leachate or landfill gas infrastructure construction design;
  - (iii) slope stability issues such as new basal excavation level; and/or
  - (iv) 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 2016, SI 2016 No.1154 and words and expressions used in this permit which are also used in those 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 or background concentration limit.

“exceeded” means that a value is above a permitted limit, or where a range of values or a minimum value is set as a permitted limit it means a value outside that range or below the minimum value, whichever is applicable.

“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 2016, SI 2016 No.1154, schedule 22 and listed in our Hydrogeological risk assessment guidance.

“inert waste” means waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater

“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.

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

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

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

“MEPP” Monitoring and extraction point plan, required by condition 4.2.2(h) to specify extraction points and routine monitoring locations.

“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.

“previous year” means the 12 month period preceding the month the annual report is submitted in.

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

“relevant waste acceptance procedures” means the procedure for the acceptance of waste at landfills and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

“relevant waste acceptance criteria” means the waste acceptance criteria and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

“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.

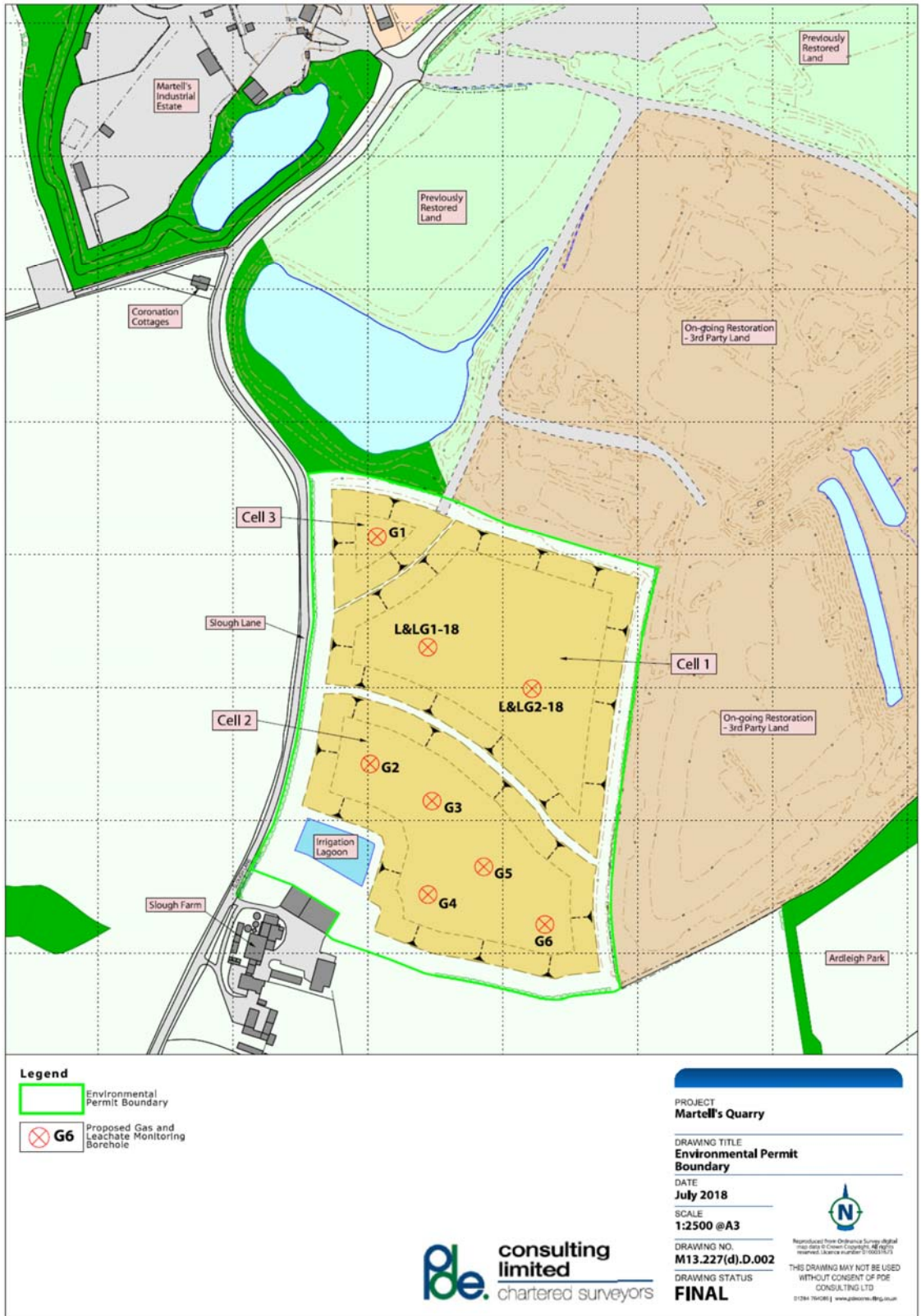
‘sustainably extracted’ means where suction can be applied to the extraction wells such that a flow rate of landfill gas, with a methane content capable of either being combusted, or treated by bio-oxidation, can be extracted without increasing the risk of air ingress to the waste or inducing aerobic degradation within the waste.

‘waste code’ - See ‘List of Wastes’.

“WFD” means Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [and repealing certain Directives] – the Waste Framework Directive.



# Schedule 7 – Site plan



“© Crown Copyright. All rights reserved. Environment Agency, 100026380, 2018.”

END OF PERMIT

**Permit Number: BP3334YQ                      Operator: Sewells Reservoir**  
**Facility: SRC Martells Quarry              Form Number: Construction Limited**  
**Performance1 / 24/10/18**

**Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY**

Parameter	Units

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: BP3334YQ Operator: Sewells Reservoir  
 Facility: SRC Martells Quarry Form Number: Construction Limited  
 Leachate 1 / 24/10/18**

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

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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 Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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: BP3334YQ                      Operator: Sewells Reservoir  
 Facility: SRC Martells Quarry              Form Number: Construction Limited  
 Groundwater1 /  
 24/10/18**

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

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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 Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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: BP3334YQ Operator: Sewells Reservoir  
 Facility: SRC Martells Quarry Form Number: Construction Limited  
 LFG1 / 24/10/18**

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

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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 Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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)