

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Land Logical Ltd

Stone Pit 1
Cotton Lane
Stone
Dartford
DA9 9ED

Variation application number

EPR/BB3906MD/V003

Permit number

EPR/BB3906MD

Stone Pit 1

Permit number EPR/BB3906MD

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

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

This variation authorises an increase in the total of imported waste from 490,000m³ to 712,500m³. The additional amount of 222,500m³ is required to complete restoration of the northern part of the former landfill. An amended waste recovery plan has been approved. Waste table S2.2 has been amended to include waste code EWC 17 05 04. Table S 3.2 has been amended to reflect the updated compliance limits for carbon dioxide (CO₂).

Improvement Conditions numbers 1-3 in Table S1.3 have been complied with leaving only Improvement condition No 4 outstanding. The registered office address has been updated.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application EPR/BB3906MD/A001	Duly made 31/10/14	Application for the permanent deposit of waste to land for the restoration of a historic landfill site including ongoing landfill gas management.
Schedule 5 Notice issued	18/12/14	Information request on waste acceptance, noise assessment, landfill gas, gas management and site management.
Schedule 5 Notice issued	18/02/15	Information request on landfill gas management plan.
Schedule 5 Notice dated 18/12/14 response received	02/03/15	Information on waste acceptance, noise assessment, landfill gas, gas management and site management received.
Schedule 5 Notice dated 18/02/15 response received	17/03/15	Landfill gas management plan received.
Additional information received	14/04/15	Further information regarding noise management.
Permit determined EPR/BB3906MD (EAWML 401693)	08/05/15	Permit issued to Land Logical Ltd
Variation determined EPR/BB3906MD	20/07/16	Varied permit to add waste codes, add crushing and screening and increase annual throughput. Varied permit issued

Status log of the permit		
Description	Date	Comments
Application EPR/BB3906MD/V003 (variation and consolidation)	Duly made 03/10/18	Application to increase volume of waste, amend Table S2.2 and consolidate permit.
Variation determined EPR/BB3906MD	11/12/18	Varied permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/BB3906MD

Issued to

Land Logical Ltd (“the operator”)

whose registered office is

Unit C

3 Regal Way

Watford

WD24 4YJ

company registration number 08272647

to operate a regulated facility at

Stone Pit 1

Cotton Lane

Stone

Dartford

Kent

DA9 9ED

to the extent set out in the schedules.

The notice shall take effect from 11/12/2018

Name	Date
Dominiqua Drakeford-Allen	11/12/2018

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BB3906MD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BB3906MD/V003 authorising,

Land Logical Ltd (“the operator”)

whose registered office is

Unit C

3 Regal Way

Watford

WD24 4YJ

company registration number 08272647

to operate a regulated facility at

Stone Pit 1

Cotton Lane

Stone

Dartford

Kent

DA9 9ED

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

Name	Date
Dominiqua Drakeford-Allen	11/12/2018

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 Avoidance, recovery and disposal of wastes produced by the activities

- 1.2.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and 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 Waste acceptance

2.4.1 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 2 table S2.1 and table S2.2; and
- (b) it has been identified as a suitable waste in the approved waste recovery plan;
- (c) its chemical, physical and biological characteristics make it suitable for its intended use on the site; and
- (d) it fulfils the approved waste acceptance criteria; and
- (e) all the approved waste acceptance procedures have been completed; and
- (f) it conforms to the description in the documentation supplied by the producer and holder; and
- (g) It is not waste consisting solely or mainly of dusts, powders or loose fibres; and
- (h) It is not hazardous wastes; and
- (i) It is not waste in liquid form.

2.4.2 The operator shall:

- (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the site and waste at the point of deposit; and
- (b) be satisfied that the waste conforms to the requirements of condition 2.4.1.

2.4.3 The total quantity of waste that shall be deposited under the permit shall be limited by the final levels shown on the final levels contour plan referenced in schedule 1 table S1.2.

2.5 Improvement programme

2.5.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.5.2 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.

2.6 Site Engineering

2.6.1 No construction of gas 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.

2.6.2 The construction of the gas 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.

- 2.6.3 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant gas infrastructure.
- 2.6.4 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.1 and 2.5.2 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.
- 2.6.5 For the purposes of conditions 2.5.1 and 2.5.3 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.
- 2.6.6 Where the Environment Agency has required further information under condition 2.5.5(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.

2.7 Gas management

- 2.7.1 The operator shall take appropriate measures, including, but not limited to, those specified in any approved gas management plan, to:
- (a) collect landfill gas; and
 - (b) control the migration of landfill gas.
- 2.7.2 The operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the operator shall use appropriate measures to flare or treat the gas in accordance with an approved landfill gas management plan.
- 2.7.3 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a revised landfill gas management plan;
 - (b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 The limits in schedule 3 shall not be exceeded.
- 3.1.2 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 table S3.1.
- 3.1.3 For the following activities referenced in schedule 1, table S1.1, A2 to A3, the limits given in Table S3.1 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.

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.

3.3 Odour

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

3.3.2 The operator shall:

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

3.4 Noise and vibration

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

3.4.2 The operator shall:

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

3.5 Monitoring

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

- (a) Point source emissions specified in tables S3.1; and
- (b) Landfill gas specified in tables S3.2, S3.3 and S3.4.

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 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 table S3.1 unless otherwise agreed in writing by the Environment Agency.

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) sub-surface landfill gas monitoring;
 - (ii) landfill gas generation and collection;
 - (iii) off-site environmental effects; and
 - (iv) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

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

- 4.2.2 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.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2 ; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables
- 4.2.4 The operator shall submit the topographical survey plans required by condition 3.5.3 (a) and (b) to the Environment Agency within one month of the completion of the survey

4.3 Notifications

- 4.3.1 In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (a) inform the Environment Agency,
 - (b) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (c) take the measures necessary to prevent further possible incidents or accidents;
- 4.3.2 In the event of a breach of any permit condition the operator must immediately—
- (a) inform the Environment Agency, and
 - (b) take the measures necessary to ensure that compliance is restored within the shortest possible time.
- 4.3.3 In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.4 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.5 Where the Environment 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 Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.6 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
- (c) 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
- (d) 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.

4.3.7 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.

4.3.8 The operator shall notify the Environment Agency in writing:

- (a) at least 14 days before the commencement of the recovery activity;
- (b) within 14 days of completion of the recovery activity.

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities		
Activity reference	Description of activities for waste operations	Limits of activities
A1 Deposit of waste to land as a recovery operation	R3: Recycling/reclamation of organic substances which are not used as solvents R5: Recycling/reclamation of other inorganic materials R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	Secure storage and use of approved wastes for the purposes of reclamation, restoration or improvement of land as detailed in the approved Waste Recovery Plan. The activities shall not be carried out other than in accordance with the approved Waste Recovery Plan. The quantities given in the approved Waste Recovery Plan shall not be exceeded. The use of waste listed in table S2.1
A2 Landfill Gas Utilisation	R1: Utilisation of landfill gas for energy recovery in an appliance with a rated thermal input < 50MW	Treatment and utilisation of landfill gas arising from the site.
A3 Landfill Gas Flaring	Flaring of landfill gas for disposal in an appliance	Landfill gas arising from the landfill.
A4 Land treatment	R10: Land treatment resulting in benefit to agriculture or ecological improvement	The use of waste listed in table S2.2 for the treatment of land resulting in ecological benefit. Waste listed in table S2.2 shall not be used to treat land that is intended to be brought into agricultural use
A5 Treatment of waste	R3: Recycling/reclamation of organic substances which are not used as solvents R5: Recycling/reclamation of other inorganic materials R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	Treatment of waste listed in table S2.2 consisting of sorting, separation, screening, crushing and blending of waste for recovery as a soil, soil substitute or aggregate.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Part B2 and Part B4 of the application forms. Documents provided in response to section 3a – technical standards, Part B4 of the application form.	16/07/14
Application	Operating Techniques for Waste Activities.	26/02/15
Waste Recovery Plan	<p>Waste Recovery Plan – Stone Pit 1, Cotton Lane, Dartford, Kent. DA9 9ED – December 2013 and associated Drawings and Appendix 2</p> <p>Additional information contained in a letter from PDE Consulting limited to the Environment Agency dated 06/02/14 including drawings numbers M11.190 (h).D.002 and M11.190 (h).D.003.</p> <p>Letter from S Walsh and Son Ltd dated 02/04/14.</p> <p>Email dated 18/09/14 confirming Land Logical Ltd to operate in accordance with the Waste Recovery Plan that was originally produced for S Walsh and Son Ltd and accepted waste types.</p>	06/02/14, 02/04/14 and 18/09/14
Response to Schedule 5 Notice dated 18/12/14	Noise assessment, landfill gas, gas management and site management.	02/03/15
Application	Gas Management Plan, Stone Pit 1 Landfill I Site, Land Logical Limited, dated March 2015.	17/03/15
Variation application	Waste Acceptance Procedure (v2) May 2016	05/16
Waste Recovery Plan-Revised	Revised Waste Recovery Plan (v2) – Approved 28/06/2018	11/05/18

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
1	<p>The operator shall replace the landfill gas flare shown on plan ‘Stone Pit 1, Cotton Lane, Gas Utilisation Compound, Figure 1’ which was submitted with the application, to a flare that can be monitored in accordance with the requirements in Table S3.1. Upon replacement of the flare, the operator shall submit a report to the agency for approval which contains the following:</p> <ul style="list-style-type: none"> Operational details of the new flare An air quality assessment to demonstrate that the emissions from the new flare will not exceed the emissions modelled for in the permit application. 	completed
2	<p>The operator shall divert all landfill gas which is currently discharged via Rig 3, to the Landfill Gas Compound where the gas shall be utilised to produce electricity or, if the gas is not of sufficient quantity or quality, the gas shall be flared.</p> <p>Upon completion of the works, a report shall be provided to the Agency which confirms that the above action has been taken and details what changes have been made to the gas collection infrastructure as a</p>	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	consequence.	
3	<p>The operator shall undertake 12 monthly rounds of sampling in accordance with Table S3.2 in the following perimeter boreholes:</p> <p>1MP01 Bottom, 1MP01SPZ, 1MP02 Bottom, 1MP02SPZ, 1MP03 Bottom, 1MP04 Bottom, 1MP05 Bottom, 1MP06 Bottom, 1MP07 Bottom, 1MP08 Bottom, 1MP08 Top, 1MP09 Bottom, 1MP09 Top, 1MP10 Top, 1MP11 Bottom, 1MP11 Top, 1MP12 Bottom, 1MP12 Top, 1MP13A Bottom, 1MP13B Bottom, 1MP13 Bottom, 1MP13 Top, 1MP14A Bottom, 1MP14B Bottom, 1MP14 Bottom, 1MP15A Bottom, 1MP15B Bottom, 1MP15 Bottom, 1MP16A Bottom, 1MP16 Bottom, 1MP17 Bottom, 1MP06 Top, 1SP-2/09.</p>	Completed
4	<p>Upon completion of the gas monitoring required under improvement condition 3, the operator shall submit to the Agency a report which contains the following:</p> <ul style="list-style-type: none"> • A proposal for trigger and control limits for methane and carbon dioxide in the perimeter boreholes listed in IC3 (above); • An action plan which demonstrates what steps will be taken upon a breach of a control limit; and • Any additional measures to be employed at the site to ensure adequate control of the landfill gas. <p>Upon agreement with the Agency, the operator shall update the Landfill Gas Management Plan to include the additional information required under this improvement condition.</p>	11/03/2019

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for deposit of waste to land as a recovery operation	
Maximum quantity	The total quantity of waste accepted at the site shall be 370,000 tonnes a year. The total volume of waste accepted at the site shall be 712,500 m³.
Waste code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03

Table S2.2 Permitted waste types and quantities for land treatment resulting in ecological improvement	
Maximum quantity	The total quantity of waste accepted at the site shall be 370,000 tonnes a year. The total volume of waste accepted at the site shall be 712,500 m³.
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
17	Construction and demolition wastes (including excavated soil from contaminated sites) construction and demolition wastes (including excavated soil
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost
19 08	wastes from waste water treatment plants not otherwise specified
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 02	garden and park wastes (including cemetery waste)

20 02 02	soil and stones
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Schedule 3 – Emissions and monitoring

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Capstone C50 LFG Micro-turbine and Scania SG1 13ST Lean Burn LFG Spark Ignition Engine shown on plan reference GUP_July18	Oxides of Nitrogen	Gas utilisation plant	650 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency
	CO		1500 mg/m ³			
	Total VOCs		1750 mg/m ³			
LowCal LFG Flare shown on plan reference GUP_July18	Oxides of Nitrogen	Landfill Gas Flares	150 mg/m ³	Hourly mean	Annually	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency. Monitoring is unnecessary where the flare is active for <10% of the year.
	CO		100 mg/m ³			
	Total VOCs		10 mg/m ³			

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1SP-1/01 05M, 1SP-1/01 10M, 1SP-1/01 15M, 1SP-1/01 20M, 1SP-1/01 25M. 1SP-1/01 30M,	Methane	1 %	Monthly	As per LFTGN03 dated September
	Oxygen	No limit		

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1SP-1/02 05M, 1SP-1/02 10M, 1SP-1/02 15M, 1SP-1/02 20M, 1SP-1/02 25M, 1SP-1/02 30M, 1SP-1/03 05M, 1SP-1/03 10M, 1SP-1/03 15M, 1SP-1/03 20M, 1SP-1/03 25M, 1SP-1/03 30M, 1SP-1/04 05M, 1SP-1/04 15M, 1SP-1/04 20M, 1SP-1/04 25M, 1SP-1/04 30M, 1SP-1/05 05M, 1SP-1/05 10M, 1SP-1/05 20M, 1SP-1/05 30M, 1SP-1/06 05M, 1SP-1/06 10M, 1SP-1/06 15M, 1SP-1/06 20M, 1SP-1/06 25M, 1SP-1/06 30M, 1SP-1/07 05M, 1SP-1/07 15M, 1SP-1/07 20M, 1SP-1/07 25M, 1SP-1/07 30M, 1SP-1/08 15M, 1SP-1/08 20M, 1SP-1/09 05M, 1SP-1/09 10M, 1SP-1/09 15M, 1SP-1/09 20M, 1SP-1/10 10M, 1SP-1/10 15M, 1SP-1/10 20M, 1SP-1/11 05M, 1SP-1/11 10M, 1SP-1/11 15M, 1SP-1/11 20M, 1SP-2/01, 1SP-2/02, 1SP-2/03, 1SP-2/04, 1SP-2/05, 1SP-2/06, 1SP-2/07, 1SP-2/08, 1SP-2/10 05M, 1SP-2/10 10M, 1SP-2/10 15M, 1SP-2/10 20M, 1SP-2/11, 1SP-2/12, 1SP-2/13, 1SP-2/14, 1SP-2/15, 1SP-2/16, 1SP-2/17, 1SP-2/19, 1MP01 Top, 1MP02 Top, 1MP03 Top, 1MP04 Top, 1MP05 Top, 1MP07 Top, 1MP13A Top, 1MP13B Top, 1MP14A Top, 1MP14 Top, 1MP15A Top, 1MP15 Top, 1MP16A Top, 1MP16 Top, 1MP17 Top, 1MP18 Top, 1MP19 Top 1MP01BTZ (1MP01 Bottom),	Atmospheric Pressure	No limit		2004 or such other subsequent guidance as may be agreed in writing with the Environment Agency. Record whether the ground is: Waterlogged; Frozen; and snow covered.

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1MP02BTZ (1MP02 Bottom), 1MP01SPZ, 1MP02SPZ, 1MP03BTZ (1MP03 Bottom), 1MP04BTZ (1MP04 Bottom), 1MP05BTZ (1MP05 Bottom), 1MP06BTZ (1MP06 Bottom), 1MP06TPZ (1MP06 Top), 1MP07BTZ (1MP07 Bottom) 1MP08BTZ (1MP08 Bottom), 1MP08TPZ (1MP08 Top), 1MP09BTZ (1MP09 Bottom), 1MP09TPZ (1MP09 Top), 1MP10TPZ (1MP10 Top), 1MP11BTZ (1MP11 Bottom), 1MP11TPZ (1MP11 Top), 1MP12BTZ (1MP12 Bottom), 1MP12TPZ (1MP12 Top), 1MP13ABT (1MP13A Bottom), 1MP13BBT (1MP13B Bottom), 1MP13BTZ (1MP13 Bottom), 1MP13TPZ (1MP13 Top),				

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1MP14ABT (1MP14A Bottom), 1MP14BBT (1MP14B Bottom), 1MP14BTZ (1MP14 Bottom), 1MP15ABT (1MP15A Bottom), 1MP15BBT (1MP15B Bottom), 1MP15BTZ (1MP15 Bottom), 1MP16ABT (1MP16A Bottom), 1MP16BTZ (1MP16 Bottom), 1MP17BTZ (1MP17 Bottom), 2IPO9G00 (1SP-2/09).				
1SP-1/09 05M, 1SP-1/09 10M, 1SP-1/10 15M, 1SP-1/11 15M, 1SP-1/11 20M	Carbon Dioxide	3%		
1SP-1/03 15M, 1SP-1/05 10M, 1SP-1/05 20M, 1SP-1/09 15M, 1SP-1/09 20M, 1SP-1/10 10M, 1SP-1/10 20M, 1SP-1/11 05M, 1SP-1/11 10M, 1MP19 Top,	Carbon Dioxide	3.5%		
1SP-1/01 05M, 1SP-1/01 10M, 1SP-1/01 20M, 1SP-1/01 25M, 1SP-01/01 30M, 1ISP-1/02 05M, 1SP-1/02 10M, 1SP-1/02 20M, 1SP-1/02 25M, 1SP-1/02 30M, 1SP-1/03 05M, 1SP-1/03 10M, 1SP-1/03 20M, 1SP-1/03 25M, 1SP-1/03 30M, 1SP-1/04 05M, 1SP-1/04 25M, 1SP-1/04 30M, 1SP-1/05 05M, 1SP-1/05 30M, 1SP-1/06 25M, 1SP-1/06 30M, 1SP-1/07 05M, 1SP-1/07 15M, 1SP-1/07 25M, 1SP-1/07 30M, 1SP-2/01, 1SP-2/02, 1SP-2/03, 1SP-2/04, 1SP-2/05, 1SP-2/08, 1MP02 Top, 1MP03 Top, 1MP04 Top, 1MP05 Top, 1MP07 Top, 1MP13A Top, 1MP13B Top, 1MP14 Top, 1MP14A Top, 1MP18 Top	Carbon Dioxide	4%		
1SP-1/04 15M, 1SP-1/04 20M, 1SP-1/06 05M, 1SP-	Carbon Dioxide	4.5%		

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1/06 10M, 1SP-1/07 20M, 1SP-1/08 20M, 1SP-2/07, 1MP01 Top				
1SP-1/01 15M, 1SP-1/02 15M, 1SP-1/06 20M, 1SP-1/08 15M, 1SP-2/06, 1SP-2/16, 1SP-2/19, 1MP17 Top	Carbon Dioxide	5%		
1SP-1/06 15M, 1SP-2/10 05M, 1SP-2/10 10M, 1SP-2/10 20M, 1SP-2/11, 1SP-2/17	Carbon Dioxide	5.5%		
1SP-2/10 15M, 1SP-2/12, 1SP-2/13, 1SP-2/14, 1SP-2/15, 1MP15 Top, 1MP16 Top	Carbon Dioxide	6%		
1IMP16A Top	Carbon Dioxide	9.1%		
1MP15A Top	Carbon Dioxide	9.6%		
1MP01BTZ (1MP01 Bottom)	Carbon Dioxide	4.1%		
1MP02BTZ (1MP02 Bottom),	Carbon Dioxide	5.2%		
1MP01SPZ	Carbon Dioxide	2.9%		
1MP02SPZ	Carbon Dioxide	4.9%		
1MP03BTZ (1MP03 Bottom)	Carbon Dioxide	3.4%		
1MP04BTZ (1MP04 Bottom)	Carbon Dioxide	2.9%		
1MP05BTZ (1MP05 Bottom)	Carbon Dioxide	5.6%		
1MP06BTZ (1MP06 Bottom)	Carbon Dioxide	16.0%		
1MP06TPZ (1MP06 Top)	Carbon Dioxide	16.1%		
1MP07BTZ (1MP07 Bottom)	Carbon Dioxide	5.8%		
1MP08BTZ (1MP08 Bottom)	Carbon Dioxide	4.8%		
1MP08TPZ (1MP08 Top)	Carbon Dioxide	4.2%		
1MP09BTZ (1MP09 Bottom)	Carbon Dioxide	7.2%		

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
1MP09TPZ (1MP09 Top)	Carbon Dioxide	4.7%		
1MP10TPZ (1MP10 Top)	Carbon Dioxide	3.5%		
1MP11BTZ (1MP11 Bottom) 1MP11TPZ (1MP11 Top)	Carbon Dioxide	4.5%		
1MP12BTZ (1MP12 Bottom)	Carbon Dioxide	4.9%		
1MP12TPZ (1MP12 Top)	Carbon Dioxide	3.9%		
1MP13BBT (1MP13B Bottom)	Carbon Dioxide	9.3%		
1MP13BTZ (1MP13 Bottom)	Carbon Dioxide	10.8%		
1MP13TPZ (1MP13 Top)	Carbon Dioxide	8.1%		
1MP14ABT (1MP14A Bottom)	Carbon Dioxide	3.4%		
1MP14BBT (1MP14B Bottom)	Carbon Dioxide	9.4%		
1MP14BTZ (1MP14 Bottom)	Carbon Dioxide	3.4%		
1MP15ABT (1MP15A Bottom)	Carbon Dioxide	8.3%		
1MP15BBT (1MP15B Bottom)	Carbon Dioxide	8.0%		
1MP15BTZ (1MP15 Bottom)	Carbon Dioxide	7.5%		
1MP16ABT (1MP16A Bottom)	Carbon Dioxide	8.8%		
1MP16BTZ (1MP16 Bottom)	Carbon Dioxide	9.0%		
1MP17BTZ (1MP17 Bottom)	Carbon Dioxide	5.6%		
2IPO9G00 (1SP-2/09)	Carbon Dioxide	4.2%		
1MP 13ABT (1MP 13A Bottom)	Carbon Dioxide	16.1%		

Table S3.3 Landfill gas emissions from restored surfaces – monitoring requirements			
Monitoring point Ref. /description	Parameter	Monitoring frequency	Monitoring Standard or method
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.
Whole site	Total methane emission	As agreed with the Environment Agency	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 S3.4 Landfill gas – other monitoring requirements				
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Gas collection system at well control valve, manifolds (if applicable) and strategic points on gas system	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Gas flow rate or suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Monthly or at such other frequency as may be agreed in writing with the Environment Agency.	Calibrated handheld monitoring instrument	Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken. Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertake Record the ambient air temperature and whether the ground is: Waterlogged; Frozen; and snow covered.
Gas collection system at well control valve	Hydrogen sulphide	Six monthly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 v. 3, 2010 or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans

Table S3.4 Landfill gas – other monitoring requirements				
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Input to flare or LFG Utilisation Compound	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 v. 3, 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency [or a trace gas characterisation method agreed with the Environment Agency].	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling.
Input to flare or LFG Utilisation Compound	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Weekly		Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken.
Flare	Temperature	As per LFTGN05 v. 2, 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	As per M2 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	

Table S3.4 Landfill gas – other monitoring requirements				
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Engines, post turbo	NOx and CO	Quarterly	In accordance with Appendix C of LFTGN08, version 2: 2010 or such other subsequent guidance as may be agreed in writing with the Environment Agency.	Where monitoring using hand-held, electrochemical equipment indicates an exceedance of the emissions standards specified in Table S3.1, these shall be used as action levels and the operator shall investigate the cause and take appropriate measures to reduce emissions.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data		
Parameter	Reporting period	Period ends
Point source emission to air As specified by schedule 3, table S3.1	Every 12 months	31 December
Landfill gas in external monitoring boreholes As specified by schedule 3, table S3.2	Every 3 months	31 March, 30 June, 30 September, 31 December
Emission of landfill gas from surfaces As specified by schedule 3, table S3.3	Every 12 months	31 December
Other Landfill gas monitoring As specified by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December
Hydrogen sulphide	Every 6 months	31 March, 30 September
Trace gas monitoring	Every 12 months	31 December

Table S4.2: Annual production/treatment	
Landfill gas: combustion in flares; combustion in gas engines; and Other methods of gas utilisation.	Normalised cubic metres/year
Average methane content entering the landfill gas utilisation or treatment compound (based on the annual average of Table S3.4 monitoring)	% methane v/v
Methane generation rate (50%ile from a representative model)	m ³ /hr

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
-	-	-

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	11/12/2018

Schedule 5 – 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

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“Annex II” means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“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 Gas Infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details of the Gas 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.

“D” means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions to land” includes emissions to groundwater.

“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.

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

“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.

“Gas Infrastructure” means any specified element of the:

- landfill gas monitoring boreholes;
- landfill gas management systems;

within the site.

“LFTGN 04” means Environment Agency Guidance for monitoring trace components in landfill gas.

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

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

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

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

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

“pests” means birds, vermin and insects.

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

“R” means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

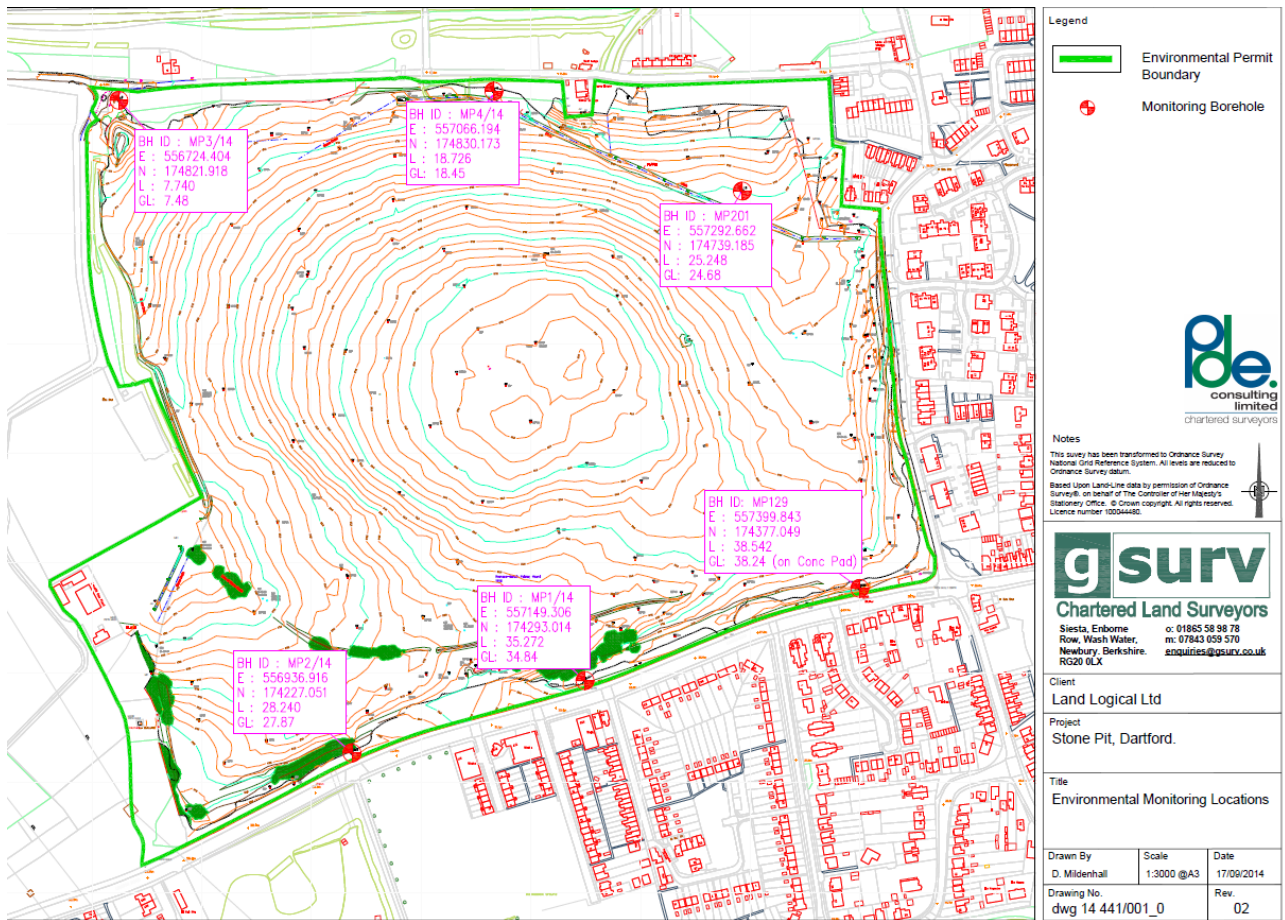
“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

“year” means calendar year ending 31 December.

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

Schedule 7 – Site plan



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