

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Grange Landfill Limited

Grange Landfill
Dropping Well
Rotherham
S61 2RB

Variation application number

EPR/DB3803MN/V002

Permit number

EPR/DB3803MN

Grange Landfill

Permit number EPR/DB3803MN

Introductory note

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

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

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

This variation is to enable an existing permitted site to reopen for the disposal of Landfill Directive compliant inert wastes. Future waste disposal will be undertaken in cells constructed to the north of the existing landfill site. The site will be operated in phases of around 5 acres or less in order to comply with a planning condition that stipulates that no more than 5 acres of land at a time shall be taken out of agricultural use. Prior to this variation application the landfill was proceeding through the required landfill closure procedure; this is no longer required. Landfill closure will cover both Phase 1 and 2 when disposal operations in phase 2 cease.

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
Permit determined EPR/RP3195ZD [WD20 R21]	11/01/78	Original permit issued to Alick Watson Limited (AWML 61563).
Modification to Licence WD20 R21	17/12/80	Local Authority modification
Modification to Licence WD20 R21	01/07/83	Local Authority modification
Modification to Licence WD20 R21	11/10/90	Local Authority modification
Modification to Licence WD20 R21	29/09/93	Local Authority modification
Modification to Licence WD20 R21	28/02/94	Local Authority modification
Application EPR/DB3803MN/V002 full transfer of permit EPR/RP3195ZD [WD20 R21]	Duly made 14/01/16	Application to transfer the permit in full to Grange Landfill Limited.
Transfer determined EPR/DB3803MN	01/02/16	Full transfer of permit complete.
Application EPR/DB3803MN/V002 (variation and consolidation)	Duly made 01/02/2016	Application to vary and update the permit to modern conditions.
Variation determined EPR/DB3803MN	23/03/2016	Varied and consolidated permit issued in modern condition format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/DB3803MN

Issued to

Grange Landfill Limited (“the operator”)

whose registered office is

**18 Stalker Walk
Sheffield
S11 8NF**

company registration number 09892165

to operate a regulated facility at

**Grange Landfill
Dropping Well
Rotherham
S61 2RB**

to the extent set out in the schedules.

The notice shall take effect from 23/03/2016

Name	Date
Samantha Haddock	23/03/2016

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/DB3803MN

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/DB3803MN/V002 authorising,

Grange Landfill Limited (“the operator”),

whose registered office is

18 Stalker Walk

Sheffield

S11 8NF

company registration number 09892165

to operate waste operations at

Grange Landfill

Dropping Well

Rotherham

S61 2RB

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

Name	Date
Samantha Haddock	23/03/2016

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 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 No activities authorised by this permit shall be commenced unless the operator has entered into an Agreement with the Environment Agency to secure financial provision for meeting the obligations under this permit and has provided the provision.

1.2.2 The operator shall give prior notice to the Environment Agency of its intention to commence operations at the site.

1.2.3 The financial provision provided under condition 1.2.1 above shall thereafter be maintained by the operator throughout the subsistence of the permit and the Operator shall produce evidence of such provision whenever required by the Environment Agency.

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

1.3.1 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 Pre-operational conditions

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

2.4.2 The operations specified in schedule 1 table S1.4B shall not commence until the measures specified in that table have been completed.

2.5 Landfill Engineering

2.5.1 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.

2.5.2 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.

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

2.5.4 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.2 and 2.5.3 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.

2.5.5 For the purposes of conditions 2.5.1 and 2.5.2, 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.

2.5.6 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.

2.6 Waste acceptance

2.6.1 Wastes shall only be accepted for disposal if:

- (a) they are listed in schedule 2, table S2.1 and
- (b) they are inert waste, and
- (c) they are not liquid waste (including waste waters but excluding sludge), and
- (d) all the relevant waste acceptance procedures have been completed, and
- (e) they fulfil the relevant waste acceptance criteria, and
- (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
- (g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.

2.6.2 Waste shall only be accepted for restoration where:

- (a) they are listed in schedule 2, table S2.2 or
- (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 ESID 1574/05.

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 S1.5.

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 Closure and aftercare

2.7.1 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 table S3.1.
- 3.1.3 Where a substance is specified in schedule 3, but no limit is set for it, the concentration of such substance in emissions from the site shall be no greater than the background concentration
- 3.1.4 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.5 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
 - (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
 - (b) between nine and six months prior to every subsequent six years after the 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.

3.3 Noise and vibration

- 3.3.1 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.
- 3.3.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to 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.

3.4 Monitoring

- 3.4.1 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;
 - (b) Groundwater specified in tables S3.2 and S3.4;
 - (c) Landfill gas specified in tables S3.3;
- 3.4.2 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.
- 3.4.3 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.

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) landfill gas monitoring;
 - (iii) waste types and quantities;
- 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. 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 activity 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 topographical surveys required by condition 3.4.3 other than those submitted as part of a CQA validation report;
 - (c) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
 - (d) an assessment of the settlement 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;
 - (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
 - (f) a plan(s) ('the monitoring point plan – MPP') showing the locations of all 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) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2 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 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions.
- 4.3.2 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.

4.3.3 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.

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

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

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities	
Description of specified activity and WFD Annex I and II operations	Limits of activities
D1: Deposit into or on to land	The deposit of inert waste into or onto land. The storage of inert waste on land prior to disposal for a period greater than 1 year.
R10: Land treatment resulting in benefit to agriculture or ecological improvement R5: Recycling/ reclamation of other inorganic material	Recovery of waste (specified within Table S2.2) for restoration

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Application in response to section 3a – technical standards, Part C4 of the application form	17/12/2015
Application	Environment Monitoring Programme No.15748/4 as amended by PO1	17/12/2015
Application	ESID Report as amended by PO3, PO4	17/12/2015
Application	Closure Plan HSID/1 and Part 11 of EMS 15748/3	17/12/2015
Application	How to comply with your environmental permit – Additional guidance for Landfill EPR 5.02	17/12/2015
Application	EPR Inert Waste Guidance: Standards and Measures	17/12/2015

Table S1.2 Operating techniques		
Description	Parts	Date Received
Additional Information received by email	Restoration Plan and Plan number 15748-07A Borehole locations	21/03/2016

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	There are no improvement conditions	

Table S1.4A Pre-operational measures	
Reference	Pre-operational Measures
PO1	<p>Prior to commencement of waste deposit the operator shall install groundwater monitoring boreholes BH1, BH2, BH3 BH4 and BH5 at the locations agreed with the Agency and sample monthly for 3 months to characterise borehole specific baseline groundwater quality.</p> <p>The monitoring boreholes shall be installed to the depth and by methods and according to a design agreed in advance and in writing by the Environment Agency.</p> <p>The following details regarding the monitoring boreholes shall be provided to the Environment Agency within 3 months of installation:</p> <ul style="list-style-type: none"> (a) casings/linings (length, diameter, material, type of grout or filter media and whether slotted or plain); (b) depths and diameters of unlined sections; (c) standing groundwater levels; (d) details of strata encountered during drilling; (e) reference levels in metres above ordnance datum; (f) national grid references of the boreholes in the form AB 12345 67890; (g) any other information obtained from the boreholes relevant to the interpretation of water sample analysis. <p>Prior to commencement of waste deposit compliance limits for ammoniacal nitrogen, cadmium, chromium, copper, lead and sulphate shall be derived, in accordance with H1 Technical Annex to Annex J: vs 2.0 April 2010 'Hydrogeological Risk Assessments For Landfills and the Derivation of Groundwater Control Levels and Compliance Limits', and applied to boreholes down hydraulic gradient boreholes BH3 and</p>

Table S1.4A Pre-operational measures	
Reference	Pre-operational Measures
	BH4.
PO2	Within 6 months of permit issue the operator shall install in-waste gas monitoring points in Phase 1 at a minimum frequency of 2 points per hectare
PO3	Within 4 months of permit issue the operator shall detail the location, sizing and construction of the proposed surface water settlement lagoon and show its location on a site plan
PO4	Prior to commencement of waste deposit compliance limits, to be applied to the discharge into the manhole at SW1, shall be proposed and agreed with the Environment Agency for ammoniacal nitrogen, cadmium, chromium, copper, lead, sulphate and Total Suspended Solids. The proposed limits shall be based on statistical evaluation of 3 months of monthly baseline surface water quality data.

Table S1.4B Pre-operational measures for future development		
Reference	Operation	Pre-operational Measures
POFD1	Waste deposit in Phase 2	Progressively install in-waste gas monitoring points at a minimum frequency of 2 points per hectare following completion and restoration of each cell in Phase 2, and commence routine in-waste gas monitoring.

Table S1.5 Annual waste input limits	
Category	Limit Tonnes/ Year
Inert Waste for disposal	150,000
Waste for restoration	55,000

Schedule 2 – List of permitted waste

Table S2.1 Permitted waste types for disposal at a landfill for inert waste	
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	waste sand and clays
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 02	Mollusc or crustacean shells from which the flesh has been completely removed
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 07	glass packaging
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixture of concrete, bricks, tiles and ceramics
17 02	wood, glass and plastic
17 02 02	glass
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones
17 05 06	dredging spoil (unless contains dangerous substances)
17 05 08	track ballast, soil and stones other than those containing dangerous substances
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 01	wastes from incineration or pyrolysis of waste
19 01 12	bottom ash and slag
19 08	wastes from waste water treatment plants not otherwise specified
19 08 02	Washed sewage grit (waste from desanding) only
19 08 99	Stone filter media (if cleaned to remove sewage contamination) only

Table S2.1 Permitted waste types for disposal at a landfill for inert waste	
Waste code	Description
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	glass
19 12 09	minerals (for example sand, stones)
19 12 12	Soil substitute other than that containing dangerous substances only
19 13	wastes from soil and groundwater remediation
19 13 02	Solid waste from soil remediation other than those containing dangerous substances
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 02	glass
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

Table S2.2 Permitted waste types for restoration	
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 09	waste sand and clays
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)
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*
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

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Discharge into manhole at SW1	Ammoniacal nitrogen Cadmium Chromium Copper Lead Sulphate	Discharge from settlement lagoon	** mg/l ¹ ** ug/l ** ug/l ** ug/l ** ug/l ** mg/l	Spot Sample	monthly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, Dec 2011), or other guidance which supersedes these documents as agreed with the Environment Agency

¹ – Limits to be agreed following completion of PO4

Table S3.1 Point source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
SW2	pH Ammoniacal nitrogen Chloride Dissolved organic carbon Electrical conductivity Arsenic Cadmium Chromium Copper Lead Mercury Nickel Zinc Hardness Sulphate Total Suspended Solids	Discharge from settlement lagoon	No Limits	Spot Sample	monthly	

Table S3.1 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
SW1	pH Chloride Dissolved organic carbon Electrical conductivity Arsenic Mercury Nickel Zinc Hardness Total Suspended Solids	Discharge from settlement lagoon	No Limits	Spot Sample	monthly	

Table S3.2 Groundwater – emission limits and monitoring requirements					
Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Down hydraulic gradient groundwater monitoring points BH3 and BH4	Ammoniacal nitrogen Cadmium Chromium Copper Lead Sulphate	**mg/l ² **mg/l **ug/l **ug/l **ug/l **mg/l	Spot Sample	Quarterly	As specified in Environment Agency Guidance TGN02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water' and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits – Annex J, version 2, April 2010

² – Limits to be agreed following completion of PO1

Table S3.3 Landfill gas in monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
In-waste monitoring boreholes	Methane	[no limit]	Quarterly	As per LFTGN03 – ‘Guidance on the management of Landfill Gas’ or other guidance which supersedes this document as agreed 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]		

Table S3.4 Groundwater – other monitoring requirements			
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
Up gradient BH1	Water level Electrical conductivity, alkalinity, chloride, ammoniacal nitrogen, sulphate, pH, arsenic, nickel, cadmium, Total organic carbon, sulphate, magnesium, calcium, sodium, zinc, chromium, iron, lead, mercury, potassium, manganese, copper, TPH (C6-C40), PAH	Monthly Monthly for 6 months, then quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010), or other guidance which supersedes these documents as agreed with the Environment Agency
Down or cross gradient BH2, BH3, BH4 and BH5	Water level Electrical conductivity, alkalinity, chloride, ammoniacal nitrogen, sulphate, pH, arsenic, nickel, cadmium, Total organic carbon, sulphate, magnesium, calcium, sodium, zinc, chromium, iron, lead, mercury, potassium, manganese, copper, TPH (C6-C40), PAH	Monthly Monthly for 6 months, then quarterly	
BH1, BH2, BH3, BH4 and BH5	Base of monitoring point (mAoD)	Annually	

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 water (other than sewer) As specified by schedule 3, table S3.1	Monthly	31 January, 28 February, 31 March, 30 April, 31 May, 30 June, July, 31 August, 30 September, 31 October, 30 November, 31 December
Emission to groundwater As specified by schedule 3, table S3.2	Quarterly	31 March, 30 June, 30 September, 31 December
Landfill gas in monitoring boreholes As specified by schedule 3, table S3.3	Quarterly	31 March, 30 June, 30 September, 31 December
Other groundwater monitoring As specified by schedule 3, table S3.4	Monthly	31 January, 28 February, 31 March, 30 April, 31 May, 30 June, July, 31 August, 30 September, 31 October, 30 November, 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.

Table S4.2 Reporting Forms		
Media/parameter	Reporting Format	Date of Form
Controlled water	Form Water 1 or other reporting format to be agreed in writing with the Environment Agency	From permit issue
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	From permit issue
Landfill gas	Form LFG 1 or other reporting format to be agreed in writing with the Environment Agency	From permit issue
Waste Return	Waste Return Form RATS2E	From permit issue
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	From permit issue

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	

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

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

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

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

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

Part B to be supplied as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“annually” means once every year.

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

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

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

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

“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 Landfill Infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details 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 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 2010, SI 2010 No.675. 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.

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

“Landfill Infrastructure” means any specified element of the:

- Artificially established geological barrier
- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes.

‘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.

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

“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.

“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

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

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

“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.

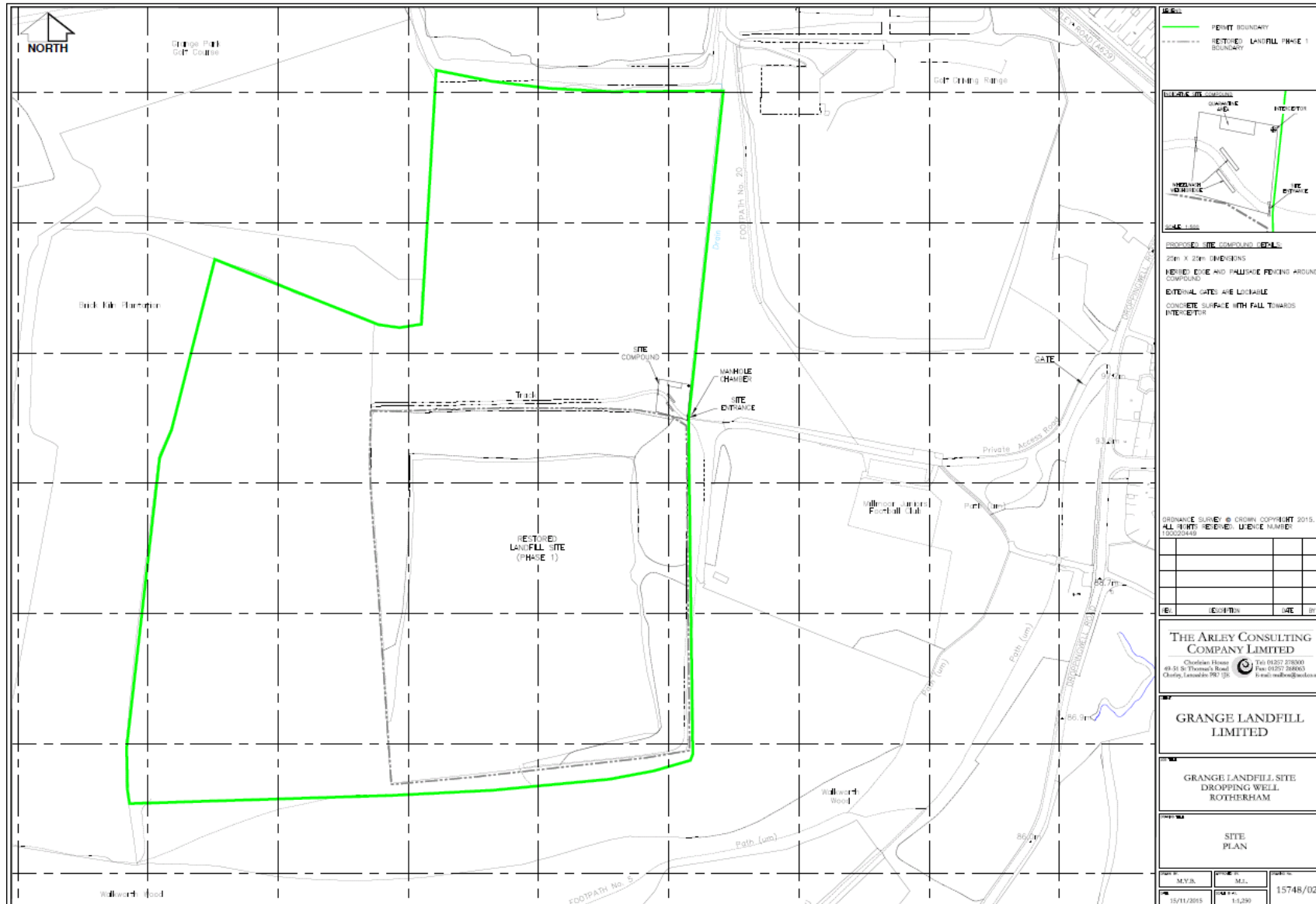
“Relevant waste acceptance procedures” means the procedure for the acceptance of waste at landfills and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

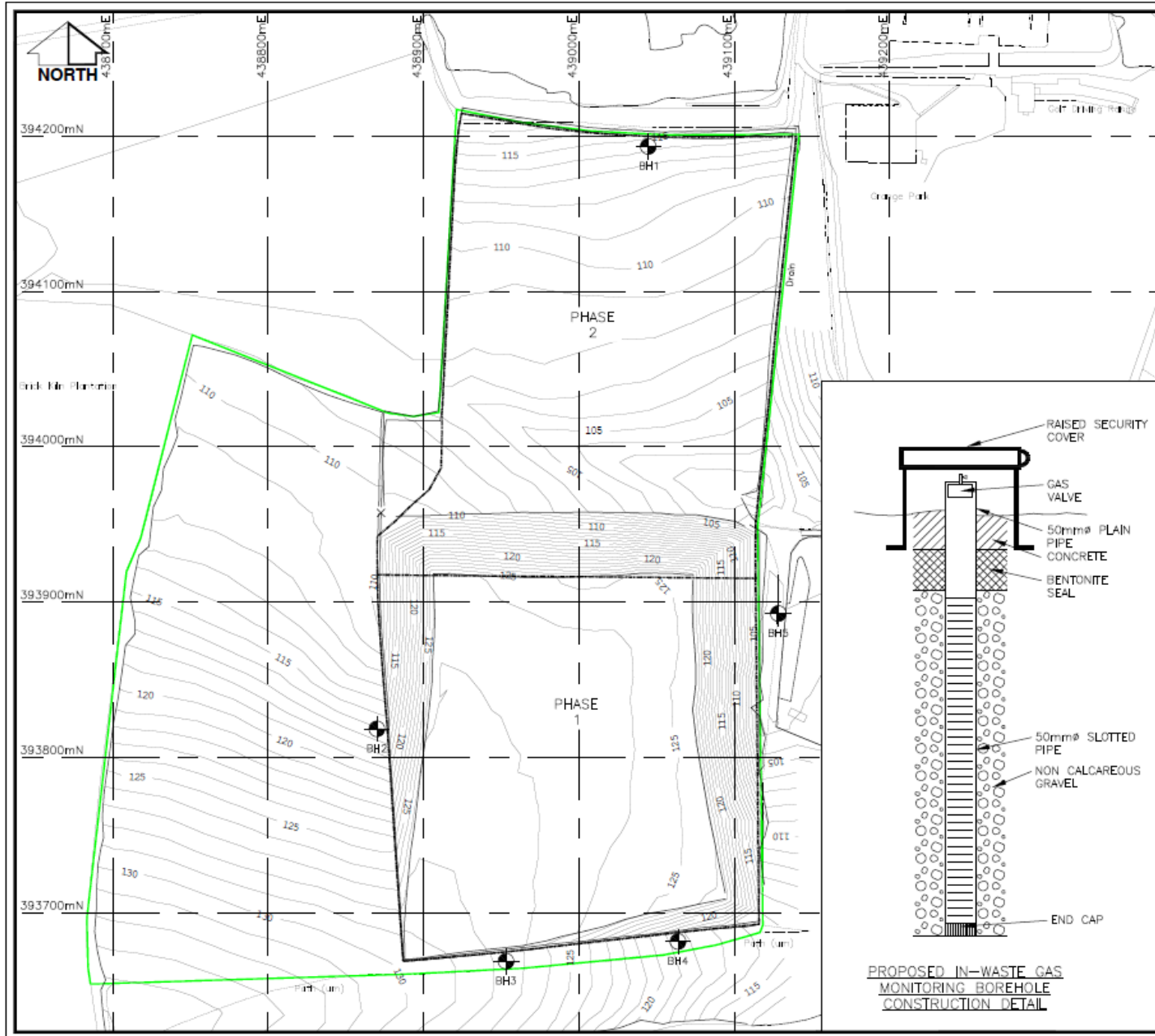
“Relevant waste acceptance criteria” means the waste acceptance criteria and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

“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.

‘Waste code’ means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

Schedule 7 – Site plan for Grange Landfill, Rotherham, S61 2RB





LEGEND

- SITE BOUNDARY
- TOPOGRAPHIC CONTOURS
- PROPOSED BOREHOLE LOCATION

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REV.	DESCRIPTION	DATE	BY
A	Inclusion of BH3	21/03/2016	MYB

THE ARLEY CONSULTING COMPANY LIMITED

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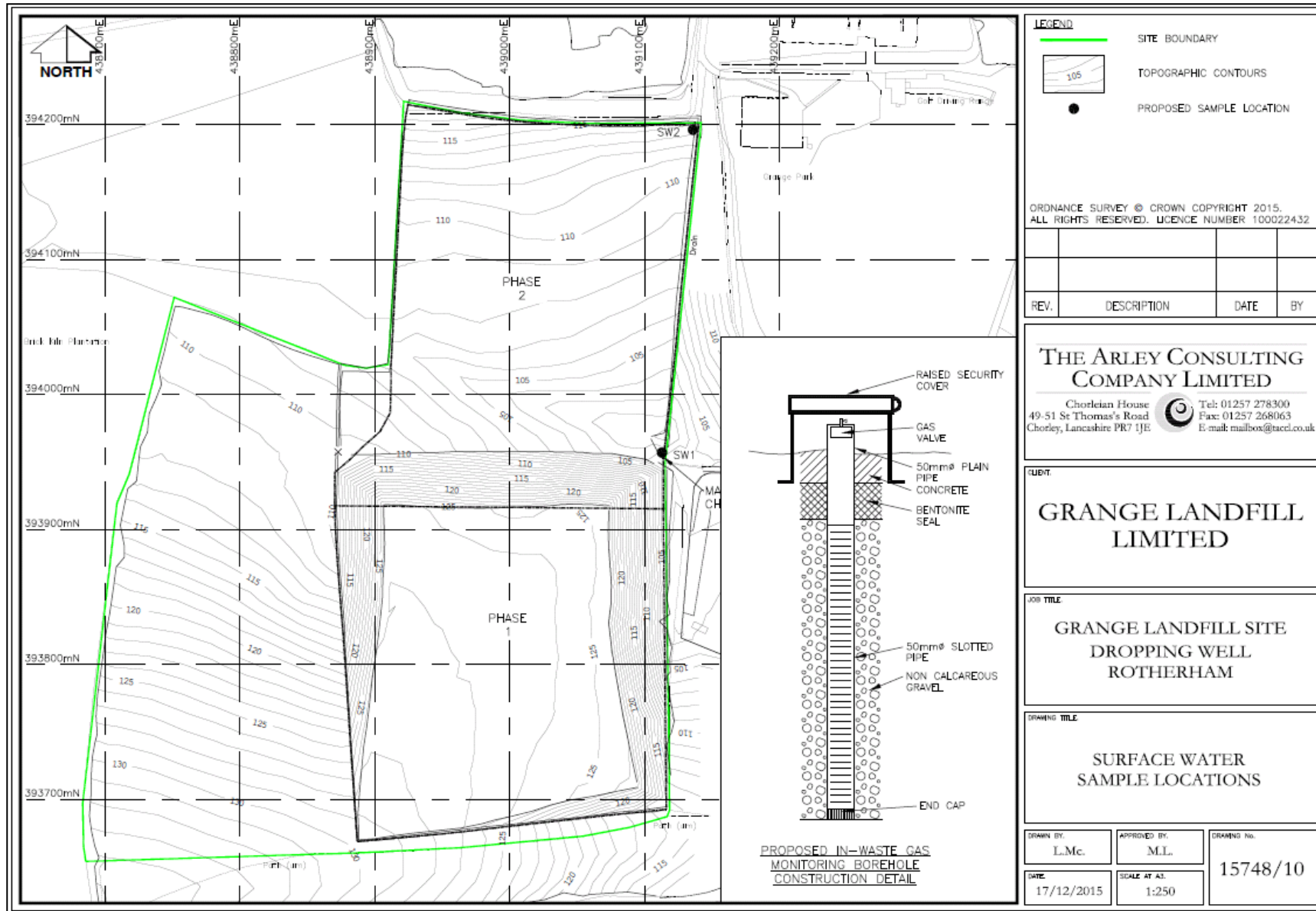
GRANGE LANDFILL LIMITED

**GRANGE LANDFILL SITE
DROPPING WELL
ROTHERHAM**

**PROPOSED
GROUNDWATER MONITORING
BOREHOLE LOCATIONS**

DRAWN BY: L.Mc.	APPROVED BY: M.L.	DRAWING No. 15748/07A
DATE 13/12/2015	SCALE AT A3: 1:250	

**PROPOSED IN-WASTE GAS
MONITORING BOREHOLE
CONSTRUCTION DETAIL**



END OF PERMIT

Permit number
EPR/DB3803MN