

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

P Casey Enviro (Clockface) Limited

Clockface Quarry Inert Site
Saddlesworth Road
Barkisland
Halifax
West Yorkshire
HX8 ODY

Permit number

EPR/BS3591SY

Clockface Quarry Inert Site

Permit Number EPR/BS3591SY

Introductory note

This introductory note does not form a part of the permit

The main features of the facility are as follows.

Clockface Quarry is situated on Saddleworth Road, south of Ringstones reservoir and immediately north of the M62. The site is close to the village of Barkisland, Halifax. The geology of the area is sedimentary in origin and comprises of Millstone Grit sandstones overlain by coal measures deposits.

This permit covers the land shown edged in red which is within the installation shown in edged in green on the site plan at schedule 7 to this permit - it authorises the deposit of Landfill Directive inert waste.

The area covered by the permit will be engineered in accordance with the requirements of the Landfill Directive for an inert landfill.

As only Landfill Directive inert waste (which also complies with the Landfill Tax Qualifying Order) will be deposited, landfill gas or leachate is unlikely to be generated, however inwaste and perimeter landfill gas monitoring will be undertaken to ensure compliance with the inert waste acceptance criteria (WAC). Conditions with respect to the monitoring of groundwater and the management and monitoring of surface water at the site are included in the permit.

Conditions with respect to the management and monitoring of other potential emissions from the site including particulate matter, noise and mud and debris are also included in the permit.

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

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Status Log of the permit

Detail	Date	Comments
Application for Clockface Quarry Inert Site (References EAWML/100648 and EA/EPR/BS3591SY/A001)	Duly made 14/08/08	
Permit determined	15/06/2010	

Other Part A installation permits relating to this installation

Operator	Permit Number	Date of Issue
Marshalls Mono Limited	WML 558	30/04/86

End of Introductory Note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit

Permit number
EPR/BS3591SY

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010


P Casey Enviro (Clockface) Limited ("the operator"),
whose registered office is

**The Casey Group
Rydings Road
Rochdale
Lancashire
OL12 9PS**

company registration number 05773788
to operate part of an installation at

**Clockface Quarry Inert Site
Saddleworth Road
Barkisland
Halifax
West Yorkshire
HX4 ODY**

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

Name	Date
	15 th June 2010

Peter Kelly
Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 15 June 2010 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
- (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 1.2.1; and
 - (c) the estimated costs for the closure and aftercare of the landfill.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is 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 red which is within the installation shown in edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- (b) 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 specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

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

2.6 Landfill Engineering

- 2.6.1 (a) No construction of any new cell shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- (b) The operator shall review the construction proposals every 12 months
- 2.6.2 The construction of a new cell shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.3 The operator shall prepare a CQA Validation Report to cover every six month period of construction of the new cell. The operator shall submit the CQA validation report to the Environment Agency as soon as practicable.
- 2.6.4 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.6.5 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:

- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.
- 2.6.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.4 and 2.6.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.8 For the purposes of conditions 2.6.1, 2.6.3 and 2.6.4, 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.
- 2.6.9 Where the Environment Agency has required further information under condition 2.6.8(a), 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 Waste acceptance

- 2.7.1 Wastes shall only be accepted for disposal if:
 - (a) they are listed in schedule 2, 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.
- 2.7.2 The operator shall visually inspect:
 - (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
 - (b) waste at the point of deposit;and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.7.3 Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.

- 2.7.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing 04261A/34.
- 2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.
- 2.7.7 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

2.8 Closure and aftercare

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land.
- 3.1.2 The limits for groundwater quality specified in schedule 3, table S3.1 shall not be exceeded.
- 3.1.3 The limits for landfill gas arising from the facility set out in schedule 3, table S3.2 shall not be exceeded.
- 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 sixth 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;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

3.3 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;
- (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 for the parameters specified in the following tables in schedule 3 to this permit:

- (a) Groundwater specified in tables S3.1 and S3.5;
- (b) Landfill gas specified in tables S3.2 and S3.3;
- (c) Surface water specified in table S3.4.

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:

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

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

4 Information

4.1 Records

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

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the 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;
 - (iv) the specification and as built drawings of the basal and sidewall engineering systems

4.1.2 The operator shall keep on site or at Rydings Road, Rochdale, Lancashire, OL12 9PS all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

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

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

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
- (b) the topographical surveys required by condition 3.5.3 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 behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
- (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;

- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the 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 S4.3; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one month of the end of each quarter, the operator shall submit to the 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.

4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) 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;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 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.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (a) the death of any of the named operators (where the operator consists of more than one named individual);
 - (b) any change in the operator's name(s) or address(es); and

- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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

- (a) the 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 “without delay”, in which case it may be provided by telephone.

Landfills for inert waste schedules

Schedule 1 - Operations

Table S1.1 activities	
Description of activities	Limits of activities
D1: Deposit into or on to land	The deposit of inert waste into or on to land.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions in Part B of the Application form and the following documents submitted as part of the Clockface Quarry Inert Landfill Site Application (EAWML 100648), which included the following:- The non-technical summary – 0421/19 Wastes for disposal and restoration – 04261/7.2 (e) Environmental Monitoring Programme – 04261/12 Security Details – 04261/7.4 Raw Materials – 04261/7.5 Management Structure – 04261/7.6 Relevant convictions – 04261/7.7 Operator Competence – 04261/7.8 Working Plan – 04261/11 Hydrogeological Risk Assessment – 04261/17 Stability Risk Assessment – 04261/16 Nuisance and Health Risk Assessment – 04261/14 Habitat Risk Assessment – 04261/8 Environmental Setting and Installation Design – 04261/13.	Dated 14/08/08
Schedule 5 Notice dated 4/02/09	All	01/04/09 (document dated March 2009)
Request for information on the Operational assessment dated 06/02/09	All	01/04/09 (document dated March 2009)
Request for information in relation to HRA and Landfill Gas following review	All	Letter dated 12/08/09 in relation to groundwater

Table S1.2 Operating techniques		
Description	Parts	Date Received
of the Schedule 5 Notice dated 17/06/09		sampling and trigger levels.
As discussed in meeting dated 3 September 2009	Letter in relation to the installation of 3 additional boreholes – W11, W12, W13 (as detailed in letter dated 29 September 2010)	Dated 27 October 2009
As discussed in meeting dated 3 September 2009	Landfill Gas Monitoring Plan for the whole of the site	Dated 29 October 2009
As discussed in meeting dated 3 September 2009	Assessment of the Interface lining system (Report No 04261/25) dated January 2010 omitting Section 6.4 'Actions in the Event of a Breach' – (this is because sections 6.4.2 states that no action is required following a single exceedence (i) and that the Agency will not be informed until 3 consecutive exceedences have occurred (iii). However Schedule 6 of the permit will require the Operator to inform the Agency of any breach, also a requirement has been included in pre-operational condition 1 for the Operator to provide a contingency action plan for groundwater in the event of the breach of any trigger levels. Also excluding the groundwater control and trigger levels which the Agency did not agree with.	5/02/10
Request for additional information in relation to the Landfill Gas Monitoring Plan (received on 29/10/09), dated 12/03/10	All	Response dated 17/03/10 (by email)
Request for additional information dated 16/03/10	Information in relation to particulate matter monitoring. Omitted: New site plan showing the whole installation boundary in green and the inert waste disposal area.	Response received 18/03/10 by email at 10.44 and 16.51
As discussed in meeting dated 29 April 2010	Letter and monitoring results in relation to revised external landfill gas monitoring trigger levels	11/05/2010
As discussed in meeting dated 29 April 2010	New Site plan showing the revised permit boundary in red and the installation boundary in green.	25/05/2010

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
1	The Operator shall submit to the Agency for approval in writing a management plan which details the appropriate measures for mud which includes the suppression of dust on the road and the prevention of mud tracking out of the site onto the public highway - in accordance with the Agency's Sector Guidance Note S5.02.	15/08/10
2	The Operator shall submit to the Agency for approval proposals for the removal, sealing and replacement of In waste landfill gas monitoring boreholes W11, W12 and W13 (Table S3.3) and the removal and sealing of groundwater monitoring boreholes GW1, GW2 and GW3 (as identified on drawing 04261/39).	15/09/10
3	The Operator shall submit to the Agency in writing for approval a Particulate Matter Management and Monitoring Plan. The Operator shall undertake any measures or recommendations approved in writing by the Agency to the timescales indicated in the approval.	15/08/10
4	The Operator shall submit to the Agency for approval specific details of the in-waste landfill gas monitoring boreholes which includes the boreholes actual design, dimensions, finalised location and estimated timescales for installation. The Operator shall undertake any measures or recommendations approved in writing by the Agency to the timescales indicated in the approval.	15/12/10

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational Measures
1	Following construction of the internal separation barrier, however prior to the deposition of inert waste in the landfill.	The Operator shall provide a report to the Agency for approval in writing which proposes revised control and trigger levels for groundwater monitoring boreholes B, C. The proposals shall take into consideration additional monitoring results obtained since the issue of the permit. The report shall also include a contingency action plan to be used in the event that any trigger levels are breached.
2	Prior to the deposit of waste in accordance with the Permit – Surface Water Management Plan.	The Operator shall submit to the Agency for approval a Surface Water Management Plan which keeps the surface water from the previously deposited waste (outside of the permit boundary) separate from the surface water from the inert waste deposited in the inert waste area in accordance with this permit. The Surface Water Management Plan shall also include details of how any surface water collecting in the base of the site (monitored by monitoring point SP7) will be dealt with and an estimated time for when surface water collecting in this area is likely to cease. Control and emission limits shall also be proposed for any emissions to surface water.

Table S1.5 Annual waste input limits

Category	Limit Tonnes/ Year
Inert waste	350,000

Schedule 2 - List of permitted wastes

Table S2.1 - Wastes that may be accepted without testing at a landfill for inert waste		
List of Wastes (England) Regulations 2005	Description	Restrictions
10 11 03	Waste glass based fibrous materials	Only without organic binders
15 01 07	Glass packaging	
17 01 01	Concrete	Selected C&D waste only(a)
17 01 02	Bricks	Selected C&D waste only(a)
17 01 03	Tiles and ceramics	Selected C&D waste only(a)
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Selected C&D waste only(a)
17 02 02	Glass	
17 05 04	Soil and stones	Excluding topsoil, peat; excluding soil and stones from contaminated sites
19 12 05	Glass	
20 01 02	Glass	Separately collected glass only
20 02 02	Soil and stones	Only from garden and parks waste; Excluding top soil, peat

Note (a) Selected construction and demolition waste (C & D waste): with low contents of other types of materials (like metals, plastic, organics, wood, rubber, etc). The origin of the waste must be known.

No C & D waste from constructions, polluted with inorganic or organic dangerous substances, e.g. because of production processes in the construction, soil pollution, storage and usage of pesticides or other dangerous substances, etc., unless it is made clear that the demolished construction was not significantly polluted.

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

Table S2.2 - Wastes that may be accepted after testing provided that they meet the waste acceptance criteria for inert waste	
European Waste Catalogue Code	Description
01 02 02	Wastes from mineral non-metalliferous excavation
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clays
01 04 10	Dusty and powdery wastes other than those mentioned in 01 04 07
01 04 13	Wastes from stone cutting and sawing other than those mentioned in 01 04 07
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 06
10 09 08	Casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 10 06	Casting cores and moulds which have not undergone pouring other than those mentioned in 10 10 05
10 10 03	Casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 02	Glass

Table S2.2 - Wastes that may be accepted after testing provided that they meet the waste acceptance criteria for inert waste	
European Waste Catalogue Code	Description
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 05 06	Dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
20 02 02	Soil and stones

Table 2.3 - Wastes for restoration that may be accepted after testing provided that they meet the waste acceptance criteria for inert waste	
European Waste Catalogue Code	Description
01 01 01	Wastes from mineral metalliferous excavation
01 02 02	Wastes from mineral non-metalliferous excavation
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clays
01 04 10	Dusty and powdery wastes other than those mentioned in 01 04 07
01 04 11	Wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 13	Wastes from stone cutting and sawing other than those mentioned in 01 04 07
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 05 06	Dredging spoil other than those mentioned in 17 05 05
17 05 08	Track ballast other than those mentioned in 17 05 07
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	Sludges from soil remediation other than those mentioned in 19 13 03

Schedule 3 – Emissions and monitoring

Table S3.1 Trigger levels for emissions into groundwater and monitoring requirements						
Monitoring point reference	Parameter	Limit (incl. unit) ¹	Control limit ¹	Reference Period	Monitoring frequency	Monitoring standard or method
Down gradient monitoring boreholes B and C	Ammoniacal Nitrogen	0.6 mg/l	2.0 mg/l	Spot sample	Every 3 months	In accordance with the Agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02)
	Cadmium	0.0015 mg/l	0.0020 mg/l			
	Chloride	90 mg/l	100 mg/l			
	Nickel	0.035 mg/l	0.040 mg/l			
	Total Organic Carbon	10 mg/l	15 mg/l			
	Sulphate	200 mg/l	400 mg/l			

Note 1 – Interim control and trigger limits until agreed in accordance with pre-operational condition 1

Table S3.2 Landfill gas in external monitoring boreholes – limits and monitoring requirements				
Monitoring point Ref. /description ¹	Parameter	Limit (incl. units)	Monitoring frequency	Monitoring standard or method
A and B	Carbon dioxide	3.2% v/v*	Monthly	In accordance with Agency guidance LFTGN 03, 'Guidance on the management of landfill gas' unless otherwise agreed in writing by the Agency
	Methane	1.0% v/v*		
C	Carbon dioxide	2.2% v/v*		
	Methane	1.1% v/v*		
D	Carbon dioxide	2.5% v/v*		
	Methane	1.0% v/v*		
E	Carbon dioxide	4.9% v/v*		
	Methane	1.2% v/v*		
F	Carbon dioxide	5.0% v/v*		
	Methane	1.1% v/v*		
A,B,C,D,E and F	Oxygen (minimum and steady)	No limit		
	Atmospheric pressure	No limit		
	Differential pressure	No limit		
	Flow (peak and steady)	No limit (Litres / hr).		
	Temperature	No limit (Degrees celcius)		
	Meteorological data	No limit		

Note 1 – Monitoring points as shown on Drawing No: 04261/45B

* - The limits specified take into account agreed background concentrations

Table S3.3 Landfill gas – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
<p>W11, W12 and W13 until these boreholes are removed in accordance with Improvement Condition 2.</p> <p>Impact searcher bar - spike test probe and/or pin well monitoring - with location to be surveyed onto an updated version of Drawing No: 04261/45B after each monitoring occasion as necessary; and 6 additional inwaste monitoring boreholes (W19, W20, W21, W22, W23, W24 and W25) to be installed in accordance with improvement condition 4</p>	<p>Methane (peak and steady)</p> <p>Carbon Dioxide (peak and steady)</p> <p>Oxygen (minimum and steady)</p> <p>Flow (peak and steady) in litres/hour (except when spike or pin well testing)</p> <p>Atmospheric pressure</p> <p>Differential pressure (except when spike or pin well testing)</p> <p>Temperature (degrees celcius)</p> <p>Meteorological Data</p>	Quarterly	In accordance with Agency guidance LFTGN 03, 'Guidance on the management of landfill gas' unless otherwise agreed in writing by the Agency	In accordance with Agency guidance LFTGN 03, 'Guidance on the management of landfill gas' unless otherwise agreed in writing by the Agency

Table S3.4 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
<p>SP1, SP2, SP3, SP7 (until this monitoring point is no longer necessary in accordance with Pre-operational condition 2, Table S1.4) SP10 and SP11, as shown on drawing 04261A/16</p>	pH	Every 3 months	In accordance with the Agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02)	None
	Electrical Conductivity			
	Temperature			
	Dissolved oxygen			
	Ammoniacal Nitrogen			
	Chloride			
	Nickel			
	COD			
	Cadmium			
	Sulphate			
	Hazardous substances screen	Every 12 months		Hazardous substances suite as specified in Appendix 6 of LFTGN01

Table S3.5 Groundwater – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter (as submitted in the Environmental Monitoring Plan submitted with the Application.	Monitoring frequency	Monitoring standard or method	Other specifications
BHB, BHC, BHE	Water level	Monthly	In accordance with the Agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02)	None specified
	pH	Every 3 months		
	Electrical Conductivity			
	Temperature			
	Ammoniacal Nitrogen			
	Chloride			
	Nickel			
	COD			
	Sodium			
	Potassium			
	TOC FILT			
	Alkalinity			
	Calcium			
	Manganese			
	Magnesium			
	Sulphate			
	BOD			
	TON			
	Speciated PAH's (From Section 7 of report 04261/25 Assessment of the Interface Lining System, January 2010)			
	Iron			
	Zinc			
Cadmium				
Lead				
Chromium				
Copper				
Mercury				
Hazardous substances screen	Every 12 months		Hazardous substances suite as specified in Appendix 6 of LFTGN01	

Schedule 4 - Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Groundwater Parameters as required by condition 3.4.1	BHB, BHC	Every 3 Months	1 January, 1 April, 1 July, 1 October
Landfill gas lateral migration Parameters as required by condition 3.4.1	A,B,C,D,E,F	Every 3 months	1 January, 1 April, 1 July, 1 October
Other Landfill gas monitoring Parameters as required by condition 3.4.1	W11, W12 and W13 until these boreholes are removed in accordance with Improvement Condition 2. Impact searcher bar - spike test probe and/or pin well monitoring - with location to be surveyed onto an updated version of Drawing No: 04261/45B after each monitoring occasion as necessary; and 6 additional inwaste monitoring boreholes (W19, W20, W21, W22, W23, W24 and W25) to be installed in accordance with improvement condition 4	Every 3 months	1 January, 1 April, 1 July, 1 October
Surface water – other monitoring Parameters as required by condition 3.4.1	SP1, SP2, SP3, SP7, SP10, SP11	Every 3 months	1 January, 1 April, 1 July, 1 October
Hazardous substances screen		Every 12 months	
Ground water – other monitoring Parameters as required by condition 3.4.1	BHB, BHC, BHE	Every 3 months	1 January, 1 April, 1 July, 1 October
Hazardous substances screen		Every 12 months	

Table S4.2: Annual production/treatment

Surface water and/ or groundwater: Disposed of off site; Disposed of to any onsite effluent treatment plant.	Cubic metres/year
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Table S4.3 Reporting forms

Media/parameter	Reporting Format	Date of Form
Groundwater	Form groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	15/06/10
Landfill gas	Form Gas 1 or other reporting format to be agreed in writing with the Environment Agency	15/06/10
Waste Return	Waste Return Form RATS2E	15/06/10
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	15/06/10

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	
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 P CASEY ENVIRO (CLOCKFACE) LIMITED

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.

“Construction Proposals”,

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

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

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliance and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the new cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the construction proposals.

“emissions to land” includes emissions to groundwater.

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

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

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Landfill Infrastructure" means any specified element of the:

- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;

within the Site.

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

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

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

- groundwater under-drainage system;
- sub-grade;
- artificially established geological barriers;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the new cell.

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

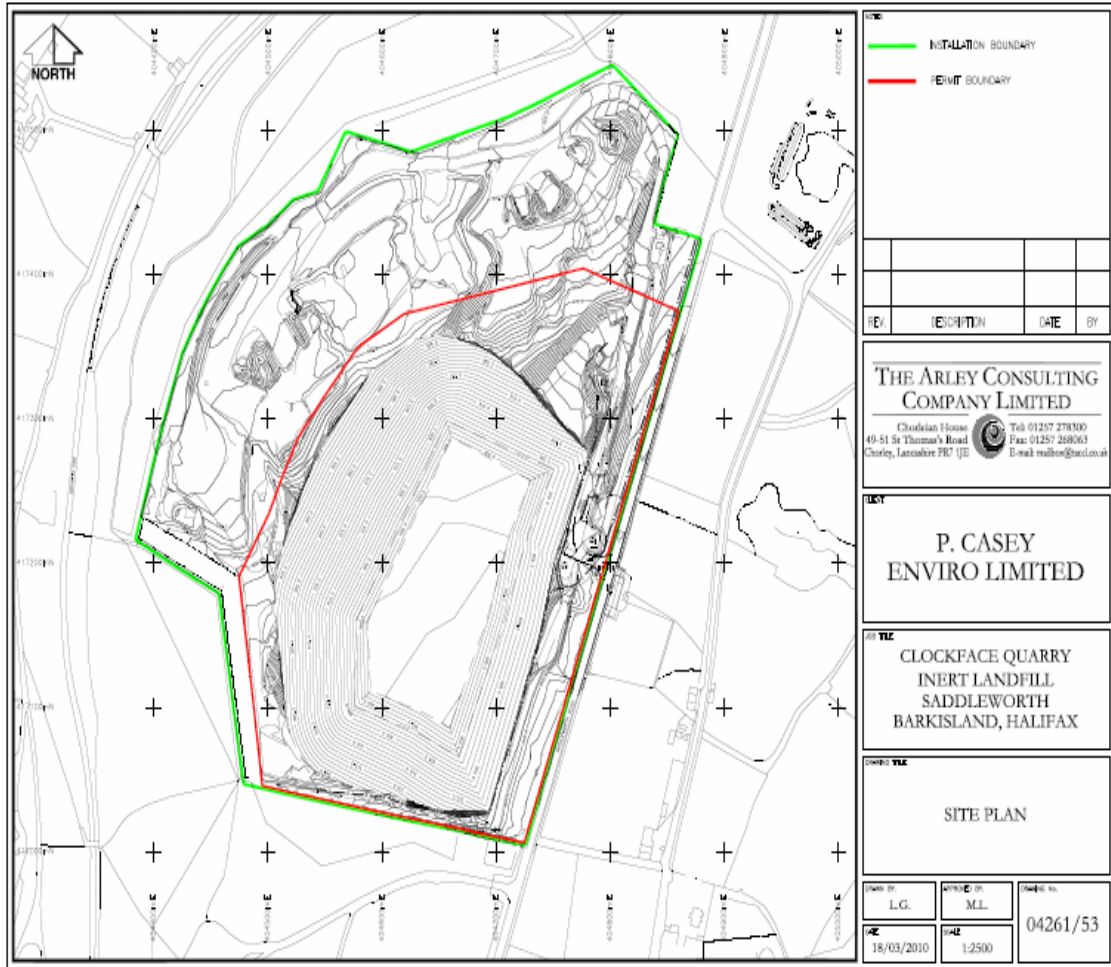
"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

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

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

"year" means calendar year ending 31 December.

Schedule 7 - Site plan



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END OF PERMIT