

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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Gwynedd Council

Ffridd Rasus Waste Management  
Facility

Morfa Road

Harlech

Gwynedd

LL46 2UW

Permit number

EPR/PP3294FJ

# **Ffridd Rasus Waste Management Facility**

## **Permit number EPR/PP3294FJ**

### **Introductory note**

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

The main features of the permit are as follows.

This is a Tier 3 bespoke permit for a:

- Civic amenity facility (A1)
- Closed Landfill Site (A2)
- Restoration of landfill (above landfill cap) (A3)

Treatment operations for the Civic amenity facility (A1) are limited to manual sorting, separation, shredding and compaction, for the purpose of recovery or disposal. There are no treatments permitted for the Closed Landfill Site (A2) or Restoration of landfill (above landfill cap) (A3).

The maximum quantity of waste accepted and processed on site for the Civic amenity facility (A1) shall not exceed 5,000 tonnes per year. No waste is permitted to be accepted at the Closed Landfill Site (A2), and a total of 13,000 tonnes per year can be used to restore the landfill.

Relevant storage and treatment capacity thresholds have been included in the permit to reflect the legal waste facility operational limits; above which, the site would be operating as an Industrial Emissions Directive installation. (See Table S1.1 for relevant limits.)

Point source emissions are controlled through the 'Emissions to water, air or land' condition and any relevant process requirements set out in Schedules 3 and 4.

All emissions from the activity which are not controlled via actual emission limits, are controlled through the 'emission of substances not controlled by emission limits condition' and any relevant process requirements set out in Tables S1.1 and S1.2.

There are monitoring and reporting requirements for the Closed Landfill Site (A2).

The burning of any wastes, either in the open, inside buildings or in any form of incinerator is not permitted.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/PP3294FJ/V011 (variation and consolidation)	Duly made 02/01/18	Variation application to: <ul style="list-style-type: none"> <li>– consolidate permit EPR/PP3294FJ (civic amenity facility and closed landfill) with EPR/BP3398EW (composting in closed vessels facility and waste transfer activity)</li> <li>– update the permit to modern conditions</li> <li>– to add some of the waste codes originally under the composting in closed vessels activity to the civic amenity facility</li> <li>– remove composting in closed vessels facility (originally in EPR/BP3398EW)</li> <li>– combine waste transfer activity (originally in EPR/BP3398EW) with the civic amenity facility</li> <li>– combine the two permitted areas, and add additional areas to the permit boundary</li> <li>– remove completed improvement conditions</li> </ul>
Variation determined EPR/PP3294FJ	29/03/18	Varied and consolidated permit issued in modern condition format

<b>Other Part A installation permits relating to this facility</b>		
<b>Operator</b>	<b>Permit Number</b>	<b>Date of Issue</b>
Gwynedd County Council	GP3330BY	31/10/05

<b>Other waste permits relating to this facility</b>		
<b>Operator</b>	<b>Permit Number</b>	<b>Date of Issue</b>
Gwynedd County Council	YB3897TF	13/03/13

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2016

**Permit number**

**EPR/PP3294FJ**

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

**Gwynedd Council** (“the operator”),

of

**Council Offices**

**Shire Hall Street**

**Caernarfon**

**Gwynedd**

**LL55 1SH**

to operate waste operations at

**Ffridd Rasus Waste Management Facility**

**Morfa Road**

**Harlech**

**Gwynedd**

**LL46 2UW**

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

Name	Date
<b>Emily Roe</b>	<b>29/03/2018</b>

Authorised on behalf of Natural Resources Wales

# Conditions

## 1 Management

### 1.1 General management

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

### 1.2 Avoidance, recovery and disposal of wastes produced by the activities

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

## 2 Operations

### 2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

## 2.3 Operating techniques

- 2.3.1 (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 Natural Resources Wales.
- (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales 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 Natural Resources Wales.
- 2.3.2 For the following activities referenced in schedule 1, table S1.1 (A1)
- Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table(s) S2.1 [, S2.2 etc.]; and
- (b) except for household waste accepted from householders, it conforms to the description in the documentation supplied by the producer and holder.

## 2.4 Technical requirements

### WEEE treatment

- 2.4.1 For the following activities referenced in schedule 1, table S1.1 (A1)
- The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex VIII of the WEEE Directive.
- 2.4.2 For the following activities referenced in schedule 1, table S1.1 (A1)
- Equipment shall be provided to record the weight of untreated WEEE accepted at, and components and materials leaving the site.

### Hazardous waste storage and treatment

- 2.4.3 For the following activities referenced in schedule 1, table S1.1 (A1)
- Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## 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 Natural Resources Wales 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 Natural Resources Wales.
- 2.5.3 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.5.4 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.1 and 2.5.2 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to Natural Resources Wales as soon as practicable.
- 2.5.5 For the purpose of condition 2.5.1, Natural Resources Wales 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 Natural Resources Wales has required further information under condition 2.5.5(b), Natural Resources Wales 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 For the following activities referenced in schedule 1, table S1.1 (A2)

No waste shall be accepted for disposal within the facility
- 2.6.2 For the following activities referenced in schedule 1, table S1.1 (A3)

Wastes shall only be accepted for recovery if:

  - (a) they are listed in schedule 2, table S2.2,
  - (b) they are not liquid waste (including waste waters but excluding sludge).
- 2.6.3 For the following activities referenced in schedule 1, table S1.1 (A3)

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.
- 2.6.4 For the following activities referenced in schedule 1, table S1.1 (A3)

The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.6.5 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.3.
- 2.6.6 For the following activities referenced in schedule 1, table S1.1 (A3)

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 recovery and of the identity of the producer. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## **2.7 Leachate levels**

- 2.7.1 The limits for the level of leachate listed in schedule 3 table S3.1 shall not be exceeded.

## **2.8 Closure and aftercare**

- 2.8.1 For the following activities referenced in schedule 1, table S1.1 (A2)

The operator shall maintain a closure and aftercare management plan.

## **2.9 Landfill Gas Management**

- 2.9.1 For the following activities referenced in schedule 1, table S1.1 (A2)

The operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:

- (a) collect landfill gas; and
- (b) control the migration of landfill gas.

- 2.9.2 For the following activities referenced in schedule 1, table S1.1 (A2)

The operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the operator shall flare or otherwise treat the gas.

- 2.9.3 The operator shall:

- (a) if notified by Natural Resources Wales, submit to Natural Resources Wales for approval within the period specified, a revised landfill gas management plan;
- (b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

# **3 Emissions and monitoring**

## **3.1 Emissions to water, air or land**

- 3.1.1 For the following activities referenced in schedule 1, table S1.1 (A2)

There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.2, and S3.3.

- 3.1.2 For the following activities referenced in schedule 1, table S1.1 (A2)

The limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.

- 3.1.3 For the following activities referenced in schedule 1, table S1.1 (A2)

There shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.

- 3.1.4 For the following activities referenced in schedule 1, table S1.1 (A2)



There shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.

3.1.5 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.3 shall not be exceeded.

3.1.6 For the following activities referenced in schedule 1, table S1.1 (A2)

The operator shall submit to Natural Resources Wales 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.

3.1.7 The limits for landfill gas arising from the facility set out in schedule 3, tables S3.4 and S3.5 shall not be exceeded.

## **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 Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales 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 Natural Resources Wales.

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

## **3.3 Odour**

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

3.3.2 The operator shall:

- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

### **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales 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 Natural Resources Wales.

### **3.5 Pests**

- 3.5.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.5.2 The operator shall:
  - (a) if notified by Natural Resources Wales, submit to Natural Resources Wales for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by Natural resources Wales.

### **3.6 Fire**

- 3.6.1 The operator shall manage and operate the activities in accordance with a written fire prevention plan using the current, relevant fire prevention plan guidance.
- 3.6.2 The operator shall:
  - (a) if notified by Natural Resources Wales that the activities could cause a fire risk, submit to Natural Resources Wales a fire prevention plan which identifies and minimises the risks of fire;
  - (b) Operate the activity in accordance with the fire prevention plan, from the date of submission, unless otherwise agreed in writing by Natural Resources Wales.

### **3.7 Monitoring**

- 3.7.1 For the following activities referenced in schedule 1, table S1.1 (A2)

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

  - (a) Leachate specified in tables S3.1 and S3.7;

- (b) Point source emissions specified in tables S3.2;
  - (c) Groundwater specified in tables S3.3 and S3.9;
  - (d) Landfill gas specified in tables S3.4, S3.5 and S3.6;
  - (e) Surface water specified in table S3.8; and
- 3.7.2 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.
- 3.7.3 For the following activities referenced in schedule 1, table S1.1 (A2)
- A topographical survey of the site referenced to ordnance datum shall be carried out:
- (a) annually, 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 Natural Resources Wales, 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) off-site environmental effects;
    - (ii) matters which affect the condition of the land and groundwater;
    - (iii) the results of groundwater monitoring;
    - (iv) sub-surface landfill gas monitoring;
    - (v) leachate levels, quality and quantities;
    - (vi) landfill gas generation and collection;
    - (vii) waste types and quantities
    - (viii) the specification and as built drawings of the basal, sidewall and capping engineering systems.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) 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 facility and any agreed amendments thereto;
  - (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3
  - (c) the annual production/treatment set out in schedule 4 table S4.2;
  - (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
  - (e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
  - (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, 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 S4.4; 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 Natural Resources Wales 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 Natural Resources Wales, 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 Natural Resources Wales 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales 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) Natural Resources Wales 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.

# Schedule 1 - Operations

Table S1.1 activities		
Activity reference	Description of activities for waste operations	Limits of activities
<b>A1</b> Civic amenity facility	<p><b>D15:</b> Storage pending any of the operations number D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>R13:</b> Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p><b>D14:</b> Repackaging prior to submission to any of the operations number D1 to D13</p> <p><b>R3:</b> Recycling/reclamation of organic substances which are not used as solvents</p> <p><b>R4:</b> Recycling/reclamation of metals and metal compounds</p> <p><b>R5:</b> Recycling/reclamation of other inorganic compounds</p>	<p>All hazardous and non-hazardous waste must be stored and treated on an impermeable surface with sealed drainage.</p> <p>Treatment operations shall be limited to manual:</p> <ul style="list-style-type: none"> <li>- sorting and/or separation</li> <li>- shredding</li> <li>- compaction</li> </ul> <p>of permitted waste for the purpose of recovery and/or disposal.</p> <p>Asbestos waste shall be double bagged and stored within clearly identified, segregated, secure, lockable containers on an impermeable surface with sealed drainage.</p> <p>The maximum quantity of</p> <ul style="list-style-type: none"> <li>- hazardous waste oils (in aggregate) that can be accepted stored or treated on site in connection with a disposal operation shall not exceed 10 tonnes per day</li> <li>- asbestos waste received at the site shall not exceed 10 tonnes per day.</li> <li>- asbestos waste stored at the site shall not exceed 10 tonnes at any one time.</li> <li>- intact and shredded waste vehicle tyres (waste code 16 01 03) stored at the site shall not exceed 50 tonnes at any one time.</li> </ul> <p>There shall be no treatment of:</p> <ul style="list-style-type: none"> <li>- 20 01 99 (nappies) other than bulking up for onwards transport.</li> <li>- asbestos waste.</li> </ul> <p>Waste types as specified in Table S2.1.</p>
<b>A2</b> Closed Landfill Site	<p><b>D1:</b> Deposit into or on to land</p> <p><b>D5:</b> Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)</p>	<p>Management and monitoring of emissions from the closed landfill (e.g. Leachate and landfill gas).</p>
<b>A3</b> Restoration of landfill	<p><b>R10:</b> Land treatment resulting in benefit to agriculture or ecological improvement</p>	<p>Recovery of waste for restoration above the landfill cap.</p> <p>Waste types as specified in Table S2.2.</p>

**Table S1.2 Operating techniques**

Description	Parts	Date Received
Technical Guidance Document: 'How to comply with your environmental permit'	All relevant sections	N/A
EPR 5.07: Clinical Waste	All relevant sections	N/A
Sector Guidance Note IPPC S5.06: Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste	All relevant sections	N/A
Fire prevention and mitigation plan guidance - Waste	All relevant sections	N/A
Fire prevention and mitigation plan	All relevant sections	13/02/18
Environmental Management system Ffridd Rasus Household waste recycling centre (from EPR/PP3294FJ)	All	01/08/11
Landfill Closure Report dated 22/03/2012 (from EPR/PP3294FJ)	All	22/03/12
Odour Management Plan reference 28587rr814i2 (from EPR/PP3294FJ)	All	05/11/13
Risk Assessment reference 28587rr793i3 (from EPR/PP3294FJ)	Appendix C	07/10/13
Risk assessment reference 28587rr797i3 (from EPR/BP3398EW)	All parts relevant to wastes now permitted under this permit	09/10/13
Odour management plan reference 28587rr814i2 (from EPR/BP3398EW)	All parts relevant to wastes now permitted under this permit	06/11/13
Environment management system reference 28587rr443i2 (from EPR/BP3398EW)	All parts relevant to wastes now permitted under this permit	06/11/13

**Table S1.3 Annual waste input limits**

Category	Limit (tonnes per year)
Waste for restoration	13,000



## Schedule 2 - Waste types, raw materials and fuels

**Table S2.1 Permitted waste types and quantities for civic amenity site**

<b>Maximum quantity</b>	The maximum quantity of waste to be accepted on site shall not exceed 5,000 tonnes per year.
<b>Exclusions</b>	Notwithstanding the waste types set out in this table, wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> <li>• Solely or mainly of dusts</li> <li>• Powders or loose fibres</li> </ul>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw)
02 01 07	wastes from forestry
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 04	materials unsuitable for consumption or processing (consisting of biodegradable waste only)
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing (consisting of biodegradable waste only)
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing (consisting of biodegradable waste only)
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 01	waste bark and wood
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging (excluding veneers, plastic coatings or laminates)
15 01 03	wooden packaging
15 01 05	composite packaging
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>

<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	wood
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>gypsum-based construction material</b>
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing hazardous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 31*	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 31
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 37*	wood containing hazardous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping

20 01 99	other fractions not otherwise specified- nappies only
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

**Table S2.2 Permitted waste types and quantities for restoration soils**

<b>Maximum quantity</b>	The maximum quantity of waste to be accepted on site for landfill restoration shall not exceed 13,000 tonnes per year.
<b>Waste code</b>	<b>Description</b>
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	soil and stones other than those mentioned in 17 05 03 (excluding soil and stones from contaminated sites)
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 02	soil and stones (only from garden and parks waste)

## Schedule 3 – Emissions and monitoring

**Table S3.1 Leachate level limits and monitoring requirements**

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring standard or method
LW4A, LW5A, LW6A and LW13	1.5 m above cell base	6 monthly	In accordance with Environment Agency document "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02), unless otherwise agreed in writing with Natural Resources Wales

**Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW1 as shown on drawing number HRA02 (August 2005)	Oil and grease	Site drainage from area 1 via interceptor	Non-visible	Spot sample	6 monthly	In accordance with Environment Agency 'Guidance on monitoring of Landfill Leachate, Groundwater and Surface Water' (LFTGN02), unless otherwise agreed in writing with Natural Resources Wales.
SW3 as shown on drawing number HRA02 (August 2005)		Site drainage from area 1 via interceptor and unnamed watercourse that runs along the northern and western boundaries of the installation				

**Table S3.3 Trigger levels for emissions into groundwater and monitoring requirements**

Monitoring point reference	Parameter	Limit (including unit)	Monitoring frequency	Monitoring standard or method
BH19A	Chloride	250 mg/l	6 Monthly	In accordance with Environment Agency Document 'Guidance on monitoring of Landfill Leachate, Groundwater and Surface Water' (LFTGN02), unless otherwise agreed in
	Ammoniacal Nitrogen	3.6 mg/l		
	Cadmium	5.5 µg/l		
BH19B	Chloride	34 mg/l		
	Ammoniacal Nitrogen	3 mg/l		
	Cadmium	5.5 µg/l		
BH19C	Chloride	34 mg/l		
	Ammoniacal Nitrogen	3 mg/l		
	Cadmium	5.5 µg/l		

**Table S3.3 Trigger levels for emissions into groundwater and monitoring requirements**

Monitoring point reference	Parameter	Limit (including unit)	Monitoring frequency	Monitoring standard or method
BH20A	Chloride	504 mg/l		writing with Natural Resources Wales.
	Ammoniacal Nitrogen	5 mg/l		
	Cadmium	5.5 µg/l		
BH20B	Chloride	504 mg/l		
	Ammoniacal Nitrogen	230 mg/l		
	Cadmium	5.5 µg/l		
BH21A	Chloride	387 mg/l		
	Ammoniacal Nitrogen	266 mg/l		
	Cadmium	5.5 µg/l		
BH21B	Chloride	215 mg/l		
	Ammoniacal Nitrogen	69.7 mg/l		
	Cadmium	5.5 µg/l		
BH29	Chloride	19.8 mg/l		
	Ammoniacal Nitrogen	19.8 mg/l		
	Cadmium	5.5 µg/l		
BH30	Chloride	504 mg/l		
	Ammoniacal Nitrogen	266 mg/l		
	Cadmium	5.5 µg/l		
BH31	Chloride	179 mg/l		
	Ammoniacal Nitrogen	102 mg/l		
	Cadmium	5.5 µg/l		

**Table S3.4 Landfill gas in external monitoring boreholes- limits and monitoring requirements**

Monitoring point Ref. /description	Parameter	Limits (including limits)	Monitoring frequency	Monitoring standard or method
monitoring borehole BHG03	Methane	1 %v/v	6 Monthly	Monitoring to be carried out in accordance with Environment Agency document "Guidance on Management of Landfill Gas (LFTGN03), unless otherwise agreed in writing with Natural Resources Wales.
	Carbon Dioxide	5.1 %v/v		
	Oxygen	-		
	Atmospheric pressure	-		
monitoring boreholes BHG04	Methane	14.8%v/v		
	Carbon Dioxide	11.1%v/v		
	Oxygen	-		
	Atmospheric pressure	-		
Spiker Bar Survey (eastern boundary, 50m spacing)	Methane	1 %v/v		
	Carbon Dioxide	-		
	Oxygen	-		
	Atmospheric pressure	-		
Spiker Bar Survey (northern boundary 25m spacing)	Methane	1 %v/v		
	Carbon Dioxide	-		
	Oxygen	-		
	Atmospheric pressure	-		

**Table S3.5 Landfill gas from capped surfaces- limits and monitoring requirements**

Monitoring point Ref. /description	Parameter	Limits (including limits)	Monitoring frequency	Monitoring standard or method
Permanently capped zone	Average methane flux and total methane emission	Average zone emission rate of 0.001 mg/m <sup>2</sup> /second	Annually	In accordance with Environment Agency document LFTGN 07 V2 2010 unless otherwise agreed in writing with Natural Resources Wales.

**Table S3.6 Landfill gas – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
Internal Landfill gas boreholes BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, BH8A, BH9, BH10, BH11, BH12, BH13, BH14, BH15, BH16, /bh17, BH18, BH19, BH20, BH21, BH22 and BH23. GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8, GW9, GW10, GW11, GW12, GW13 and GW14	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Differential pressure Meteorological Data	Quarterly	In accordance with Environment Agency Document “Guidance on Management of Landfill Gas” (LFTGN03), unless otherwise agreed in writing with Natural Resources Wales.
Input to LFG Utilisation Compound.	Trace gas analysis	Annually	In accordance with Environment Agency’s guidance document “Guidance for monitoring trace components in landfill gas” (LFTGN04), unless otherwise agreed in writing with Natural Resources Wales.
Input to LFG Utilisation Compound	Methane Carbon Dioxide Oxygen Gas flow rate % Balance Gas (calculated as the difference between the sum of measured gases and 100%)	Fortnightly	
Landfill gas flare	Oxides of nitrogen Carbon monoxide Total VOC’s	Annually	In accordance with Environment Agency Guidance Document M2 (Version 8.1, December 2011), unless otherwise agreed in writing with Natural Resources Wales.

**Table S3.7 Leachate – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
LW4A, LW5A., LW6A and LW13	Level, Temperature, Cl, pH, EC, NH <sub>4</sub> , Ca, Mg, K, Na, Alkalinity, TOC, SO <sub>4</sub> , TON, phenol, COD, BOD.	Six Monthly	In accordance with Environment Agency document “Guidance on monitoring of landfill leachate, Groundwater and Surface Water (LFTGN02), unless otherwise agreed in writing with Natural Resources Wales.
LW4A, LW5A., LW6A and LW13	Cd, CR, Cu, Fe, Pb, Mn, Ni, Zn and Hazardous Substances	Annually	Appendix 6 of H1 – Annex J3 “Additional guidance for hydrogeological risk assessments for landfills and the derivation of groundwater control levels and compliance limits”

**Table S3.8 Surface water – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
SW1, SW2, SW3	Cl, COD, DO, EC, NH <sub>4</sub> , pH, Temperature	6-monthly	In accordance with Environment Agency Document ‘Guidance on monitoring of Landfill Leachate, Groundwater and Surface Water’ (LFTGN02), unless otherwise agreed in writing with Natural resources Wales.

**Table S3.9 Groundwater – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
BH1, BH15, BH18 (A&B), BH19 (A, B & C), BH20 (A&B), BH21 (A&B), BH23, BH24, BH27-BH36 and NRA3.	Water level, DO, pH, EC, NH <sub>4</sub> , Cl, Ca, Mg, K, Na, Alkalinity, TOC, SO <sub>4</sub> , TON, Phenol and Cd.	Quarterly	Monitoring to be carried out in accordance with Environment Agency Document ‘Guidance on monitoring of Landfill Leachate, Groundwater and Surface Water’ (LFTGN02), unless otherwise agreed in writing with Natural Resources wales.
	Cr, Cu, Fe, Pb, Mn, Ni and Zn.	Annually	

## Schedule 4 - Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Leachate levels As required by condition 3.7.1	LW4A, LW5A, LW6A and LW13	Every 6 months	01/06
Emissions to air Parameters as required by condition 3.7.1	Landfill Gas Flare	Every 12 months	01/06
Emissions to water Parameters as required by condition 3.7.1	SW1, SW3	Every 6 months	01/06
Groundwater Parameters as required by condition 3.7.1	BH19A, B & C BH20 A & B BH21 A & B BH29, BH30, BH31	Every 6 months	01/06
Landfill gas surface emissions Parameters as required by condition 3.7.1	BHG03, BHG04, Spike Bar Surveys	Every 6 months	01/06, 01/12
Other Landfill gas monitoring Parameters as required by condition 3.7.1	Landfill gas boreholes BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, BH8A, BH9, BH10, BH11, BH12, BH13, BH14, BH15, BH16, /bh17, BH18, BH19, BH20, BH21, BH22 and BH23. GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8, GW9, GW10, GW11, GW12, GW13 and GW14	Every 3 months	01/03, 01/06, 01/09, 01/12
Other leachate monitoring Parameters as required by condition 3.7.1	LW4A, LW5A., LW6A and LW13	Every 6 months	01/06, 01/12
Hazardous substance screen		Every 12 months	01/12
Other surface water monitoring Parameters as required by condition 3.7.1	SW1, SW2, SW3	Every 6 months	01/06, 01/12

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Leachate: - Disposed of off-site; - Disposed of to any onsite effluent treatment plant; - Recirculated into the waste mass.	Cubic metres/year
Surface water and/ or groundwater: - Disposed of off-site; - Disposed of to any onsite effluent treatment plant.	Cubic metres/year



**Table S4.2: Annual production/treatment**

Parameter	Units
Landfill gas: <ul style="list-style-type: none"> <li>- combustion in flares;</li> <li>- combustion in gas engines;</li> <li>- Other methods of gas utilisation.</li> </ul>	Normalised cubic metres/year

**Table S4.3 Reporting forms**

Media/parameter	Reporting format	Date of form
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Natural Resources Wales	21/05/13
Air	Form Air 1 or other reporting format to be agreed in writing with the Natural Resources Wales	21/05/13
Controlled water	Form water 1 or other reporting format to be agreed in writing with the Natural Resources Wales	21/05/13
Groundwater	Form groundwater 1 or other reporting format to be agreed in writing with the Natural Resources Wales	21/05/13
Landfill gas	Form Gas 1 or other reporting format to be agreed in writing with the Natural Resources Wales	21/05/13
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Natural Resources Wales	21/05/13

## Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

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

### Part A

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

<b>(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</b>
---

<b>To be notified within 24 hours of detection</b>
--

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

<b>(b) Notification requirements for the breach of a limit</b>
--

<b>To be notified within 24 hours of detection unless otherwise specified below</b>
---

Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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

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

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

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

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

\* authorised to sign on behalf of the operator

## Schedule 6 - Interpretation

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

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

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

*“annually”* means once every year.

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

*“authorised officer”* means any person authorised by Natural Resources Wales 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.

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

*“emissions to land”* includes emissions to groundwater.

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

*“End-of-Life Vehicles Directive”* means Directive 2000/53/EC of the European Parliament and Council of 18 September 2000 on end-of-life vehicles.

*“EP Regulations”* means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

*“hazardous property”* has the meaning in Annex III of the Waste Framework Directive.

*“hazardous substance”* means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

*“hazardous waste”* has the meaning given in the Hazardous Waste (Wales) Regulations 2005 (as amended).

*“impermeable surface”* means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the surface.

*“Landfill Infrastructure”* means any specified element of the:

- permanent capping;
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;

within the site.

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

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

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

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

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

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

- groundwater under-drainage system;
- permanent geophysical leak location system;
- leak detection layer;
- sub-grade;

- barriers;
- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the New Cell.

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

*“Pests”* means Birds, Vermin and Insects.

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

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

*“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 established by Commission Decision 2000/532/EC as amended from time to time (the ‘List of Wastes Decision’) and in relation to hazardous waste, includes the asterisk.

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

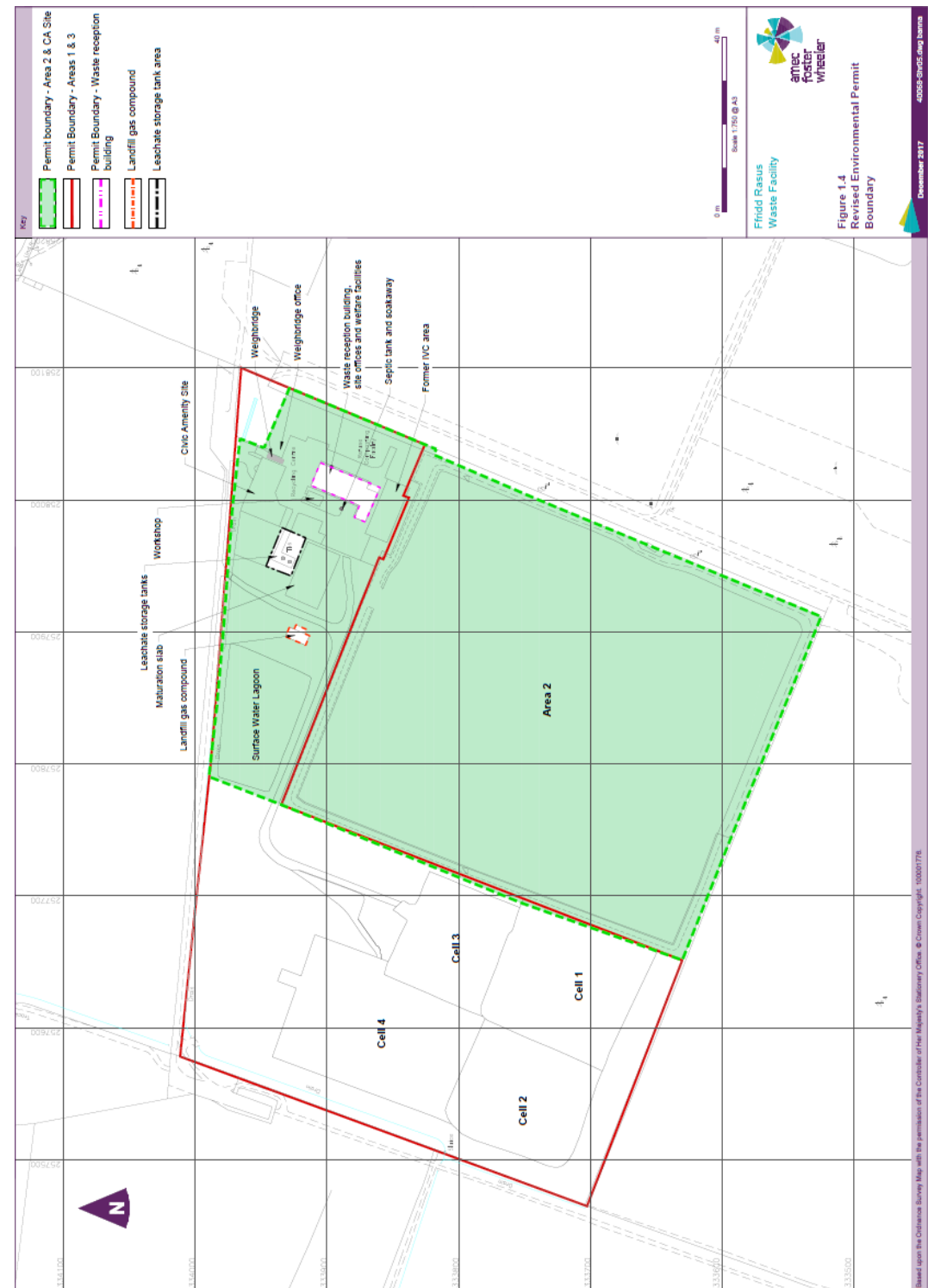
*“WEEE”* means waste electrical and electronic equipment.

*“WEEE Directive”* means Directive 2012/19/EU of the European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE).

*“year”* means calendar year ending 31 December.

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 that limit.

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



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END OF PERMIT

Permit Number: PP3294FJ  
Facility: Fridd Rasus Landfill (Area 2)

Operator: Gwynedd County Council  
Form Number: Water1/ 21/05/13

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

Emission Point	Substance /Parameter	Emission Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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

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

Date.....



Permit Number: PP3294FJ  
Facility: Fridd Rasus Landfill (Area 2)

Operator: Gwynedd County Council  
Form Number: Leachate 1 / 21/05/13

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

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

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

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

Date.....

Permit Number: PP3294FJ  
Facility: Fridd Rasus Landfill

Operator: Gwynedd County Council  
Form Number: Groundwater1 / 21/05/13

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

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

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

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

Date.....

Permit Number: PP3294FJ  
Facility: Fridd Rasus Landfill

Operator: Gwynedd County Council  
Form Number: LFG1 / 21/05/13

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

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

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

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

Date.....

Permit Number: PP3294FJ  
Facility: Fridd Rasus Landfill

Operator: Gwynedd County Council  
Form Number: Air1 / 21/05/13

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>

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

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

Date.....