

# Permit with introductory note

Pollution Prevention and Control (England and Wales) Regulations 2000

Bryn Posteg Landfill Gas Utilisation Plant  
Gwynt Cymru Ltd  
Tylwch Road  
Llanidloes  
Powys  
SY18 6JJ

Permit number

TP3736SQ

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# Introductory note

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

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

In some sections of the Permit, conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows.

This Permit allows Gwynt Cymru Ltd. to operate a Gas engine at Bryn Posteg Landfill Site to generate electricity, by utilising the landfill gas produced by the site. The installation at Bryn Posteg Landfill is operated under a separate permit by Sundorne Products (Llanidloes) Ltd.

Gwynt Cymru's operations at Bryn Posteg are primarily contained within the Landfill Gas Compound within the installation boundary. The gas compound comprises of one gas utilisation engine with associated generator, cooling and management and control systems, electrical transformer, substation and oil and waste oil storage facilities. The gas utilisation engine has a power production rate of approximately 1 Megawatt per hour

Also contained within the gas compound is an enclosed flare stack which provides a back up control system to deal with excess gas and periods of engine down time for maintenance. The flarestack, gas flow and condensate collection and treatment controls remain under the operation of Sundorne Products (Llanidloes) Ltd.

Emissions to air via both the Engine exhaust and the flare, are of typical products of combustion: Carbon Monoxide and dioxide, oxides of nitrogen and sulphur. In addition there will be emissions of methane and non-methane organic compounds. Risk assessments have been completed for these emissions and Emission Limit Values (ELV'S) have been set within the respective permits.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation		
Permit holder	Permit Number	Date of Issue
Sundorne Products (Llanidloes) Ltd	BU7766	15 June 2004

Superseded Licences/Authorisations/Consents relating to this installation		
Holder	Reference Number	Date of Issue
Sundorne Products (Llanidloes) Ltd	EAWML 47065	01/04/96

Other non-PPC activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit. These are listed in the Table below. These activities include:

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	Reference Number	Date of issue
Trade Effluent Discharge Consent	01226025501	01/08/85
Sundorne Products (Llanidloes) Ltd	EAWML 47120	25/05/01

## Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

## Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

## Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

## Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit. As the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

## Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

## Status Log

Detail	Dates
Application (Partial Transfer of Gas Utilisation Plant)	Received 10/03/05 Duly Made 18/04/05
Additional Information : Lease Agreement	18/03/05 Signed Copy received 08/06/05
Additional Information : Risk assessment for Engine Emissions	Received 21/04/05
Additional Information: Operations Plan	Received 10 /05/05
Additional Information: Site Plan Ref. Bryn Pos2/Electricity Generation Agreement Site Plan.dwg 01 and Plan: Bryn Posteg Landfill Gas Electricity Unit dated 02/03/05	Received 25/05/05
Permit Determined	Issued 15 June 2005

End of Introductory Note.



**Permit**

Pollution Prevention and Control  
(England and Wales) Regulations 2000

**ENVIRONMENT  
AGENCY**

## Permit

Permit number

**TP3736SQ**

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973), and Regulation 6 of the Landfill (England and Wales) Regulations 2002 (SI 2002 No.1559) hereby authorises **Gwynt Cymru Ltd** ("the Operator"),

Of/ whose Registered Office (or principal place of business) is

**Park Avenue  
Aberystwyth  
Ceredigion  
SY23 1PG**

**Company registration number 4857510**

to operate part of an installation at


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**Bryn Posteg Landfill  
Tylwch Road  
Llanidloes  
Powys  
SY18 6JJ**

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

Signed

Date

	<i>15<sup>th</sup> June 2005.</i>
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Dirk Comerford

Authorised to sign on behalf of the Agency

# Conditions

## 1. General

### 1.1 Permitted Activities

- 1.1.1 The Operator is authorised to carry out the activities and the directly associated activities specified in Table 1.1.1.

**Table 1.1.1**

Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
None		
<b>Unlisted Directly Associated Activity</b>		
Landfill gas management	Utilisation of landfill gas for energy recovery in a facility <3MW net rated thermal input	Landfill gas arising from the Permitted landfill
Fuel Storage	Storage and Handling of utility materials (oils, coolant, waste oils)	Receipt of materials, storage, transfer to engines and storage of waste materials prior to disposal.

### 1.2 Site

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on Plan referenced Bryn Posteg Landfill Gas Electricity Unit in Schedule 5 to this Permit, which is within the area edged in red on the Site Plan, in Schedule 5, that represents the extent of the installation covered by this Permit and that of the other Operator of the installation.

### 1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a written management system and organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

### 1.4 Improvement Programme

- 1.4.1. The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table and shall send written notification of the date of completion of each requirement to the Agency on submission or within 14 days of the completion of each such requirement.

**Table 1.4.1: Improvement programme requirements**

Reference	Requirement	Date
Not Applicable		

- 1.4.2. Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 it shall send written notification of such failure to the Agency within 14 days of such date.

## **1.5 Minor Operational Changes**

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique and relevant provisions in the Application shall be deemed to be amended.

## **1.6 Pre-Operational Conditions**

- 1.6.1 There are no pre -operational conditions.

## **1.7 Off-site Conditions**

- 1.7.1 There are no off-site conditions.

## 2. Operating conditions

### 2.1 In –Process Controls

- 2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

**Table 2.1.1: Operating techniques**

Description	Parts	Date Received
Application	Whole Document	10/03/05
Risk Assessment of Engine Emissions	Whole Document	21/04/05
Operations Plan	Whole Document	10/05/05

- 2.1.2 No Condition.

## 2.2 Emissions

### 2.2.1 Emissions to Air, (excluding Odour, Noise or Vibration) from Specified Points

2.2.1.1 Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.

2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

**Table 2.2.1 : Emission points to air**

Emission point reference or description	Source	Location of emission point
Landfill Gas Engine -LG	Landfill gas engine	Exhaust Monitoring Point as detailed on Site Plan : Bryn Posteg Landfill Gas Electricity Unit dated 02/03/05

2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 shall not be exceeded.

**Table 2.2.2 : Emission limits to air and monitoring**

Emission point reference	Parameter	Limit (including Reference Period) <sup>1</sup>	Monitoring frequency	Monitoring method
Landfill Gas Engine	Oxides of Nitrogen (NO <sub>x</sub> )	441.18	1 <sup>st</sup> year 6 monthly thereafter annual	Extractive sampling and Chemiluminescence
Landfill Gas Engine	Carbon Monoxide (CO)	1500	Annual	Extractive sampling and Non – dispersive infra red analysis
Landfill Gas Engine	Total Volatile Organic Compounds (NMVOC'S)	1750	Annual	Extractive sampling and FID analysis
Landfill Gas Engine	Non Methane Volatile Organic Compounds 9NMVOC'S)	150	Annual	Extractive Sampling and Extractive sampling onto sorbent, extraction by cs2 analyser by GC with appropriate detector
Landfill Gas Engine	CO <sub>2</sub>	1448.7	Annually	To be agreed with the Agency
Landfill Gas Engine	SO <sub>x</sub>	None	1 <sup>st</sup> Year 6 monthly thereafter Annual	To be agreed with the Agency

## 2.2.2 Emissions to water (other than groundwater), from specified points

2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

### Emissions to Water (other than to Sewer)

2.2.2.2. Conditions 2.2.2.3 - 6 shall not apply to emissions to sewer.

2.2.2.3 No emission from the Permitted Installation shall be made to water.

**Table 2.2.4: Emission point to water**

Emission Point Reference and/or location description	Source	Receiving Water
Not applicable		

2.2.2.4 No Condition Applies.

**Table 2.2.5 : Emission limits to water and monitoring**

Emission point reference	Parameter	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Not Applicable				

2.2.2.5 No condition applies.

2.2.2.6 No condition applies.

### Emissions to sewer

2.2.2.7 No emission from the permitted installation shall be made to sewer.

**Table 2.2.6 Emission points to sewer**

Emission point reference or description	Source	Sewer
Not Applicable		

2.2.2.8 No Condition applies.

**Table 2.2.7: Emission limits and monitoring frequency to sewer**

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Not Applicable				

2.2.2.9 No Condition applies

## **2.2.3 Emissions to groundwater**

- 2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application.

## **2.2.4 Fugitive emissions of substances to air**

2.2.4.1 The Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- open surfaces, unfilled, operational and filled landfill surfaces
- storage areas
- buildings
- pipes, valves and other transfer systems

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

## **2.2.5 Fugitive emissions of substances to water and sewer**

2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall ensure that all appropriate measures are taken to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:

- all structures under or over ground
- surfacing
- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

## **2.2.6 Odour**

2.2.6.1 The Operator shall ensure that all appropriate measures, including BAT, are taken to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

- controlling operational activities to minimise the generation of odour
- limiting the use of odorous materials
- restricting odorous activities
- controlling the storage conditions of odorous materials
- optimising the performance of abatement systems
- timely monitoring, inspection and maintenance
- employing, where appropriate, an approved odour management plan
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provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.



## **2.2.7 Emissions to Land**

- 2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.
- 2.2.7.2 No emission from the Permitted installation shall be made to land.
- 2.2.7.3 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

## **2.3 Management and Fit and Proper Person**

- 2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

### **Training**

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

### **Maintenance**

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
  - 2.3.6.1 a written or electronic maintenance programme; and
  - 2.3.6.2 records of its maintenance.

### **Incidents and Complaints**

- 2.3.7 The Operator shall maintain and implement written procedures for:
  - 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits and if such event occur;
  - 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
  - 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

## **2.4 Efficient use of raw materials**

- 2.4.1 The Operator shall:
- 2.4.1.1 maintain the raw materials table or description submitted in response with the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
- 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and
- 2.4.1.3 No Condition applies.

## **2.5 Waste Storage and Handling**

- 2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste within the non-landfill parts of the permitted installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.
- 2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the operator shall be no less effective than those described in the application, where relevant.

## **2.6 Waste recovery or disposal**

- 2.6.1 Waste produced at the Permitted Installation shall be recycled or recovered unless technically and/or economically impossible.
- 2.6.2 No condition applies
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.

## **2.7 Energy Efficiency**

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information listed in Table S4.2 at Schedule 4.

- 2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Notes as from time to time amended. Energy efficiency shall be secured in particular by:
- ensuring that the appropriate operating and maintenance systems are in place;
  - ensuring that all plant is adequately insulated to minimise energy loss or gain;
  - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
  - ensuring employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
  - where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Notes; and
  - maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Notes.

## **2.8 Accident prevention and control**

- 2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

## **2.9 Noise and Vibration**

- 2.9.1 The Permitted Installation shall be designed, operated and maintained using BAT so as to avoid reasonable cause for annoyance from noise or vibration, in particular by:
- equipment maintenance e.g. fans, pumps, motors, conveyors and mobile plant;
  - use and maintenance of appropriate attenuation e.g. silencers, barriers, enclosures;
  - timing and location of noisy activities and vehicle movements;
  - periodic checking of noise emissions, either qualitatively or quantitatively; and
  - maintenance of building fabric.

Provided always that the techniques used by the operator shall be no less effective than those described in the application, where relevant

- 2.9.2 Emergency generators/alarms/sirens/release valves, shall only be tested between the hours of 10.00 and 17.00 Monday to Friday and not on any Public Holiday.

## **2.10 On Site Monitoring**

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of conditions.

- 2.10.2 No Condition.
- 2.10.3 No Condition.
- 2.10.4 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.
- 2.10.5 The Operator shall maintain records of all monitoring taken or carried out (this includes 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.
- 2.10.6 There shall be provided:
  - 2.10.6.1 safe means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, when required by the Agency unless otherwise specified in that Schedule; and
  - 2.10.6.2 safe means of access to other sampling/monitoring points when required by the Agency.

## 2.11 Closure, Aftercare and Decommissioning

- 2.11.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

**Table 2.11.1: Closure, Aftercare and Decommissioning techniques**

Description	Parts	Date Received
Application	Response in operations plan	10/05/05

- 2.11.2 Where the above Table refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the later document(s) shall prevail to the extent of such conflict.
- 2.11.3 In respect of activities on the installation which are not Listed in Section 5.2 Part 1 A (1)(a) or (b) of Schedule 1 of the PPC Regulations, the Operator shall maintain and operate these activities so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:
  - 2.11.3.1 attention to the design of new plant or equipment;
  - 2.11.3.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out.; and
  - 2.11.3.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.4 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.

- 2.11.5 The Operator shall implement the site closure plan on receipt of a notice from the Agency approving definitive closure of the landfill or part thereof.
- 2.11.6 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan in respect of any non-landfill activities.

## 2.12 Multiple Operator installations

- 2.12.1 There are no conditions as a result of the interactions of the Permits covering this installation.

## 2.13 Transfer to effluent treatment plant

- 2.13.1 No transfer from the Permitted Installation shall be made to effluent treatment plant.

Transfer point description/identifier	Source	Effluent Treatment Plant
Not applicable		

- 2.13.2 No Condition Applies.

Parameter	Transfer Point	Limit, incl. reference period	Monitoring frequency	Monitoring Method
Not Applicable				

### **3 Records**

- 3.1.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:
- be made available for inspection by the Agency at any reasonable time
  - be supplied to the Agency on demand and without charge
  - be legible
  - be made as soon as reasonably practicable
  - indicate any amendments which have been made and shall include the original record wherever possible; and
  - be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing.

## 4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out, as follows:
- in respect of the parameters and emission and monitoring points specified in Schedule 2.
  - for the reporting periods specified in Schedule 2 and using the forms specified in Table S3 to Schedule 3;
  - giving the information from such results and assessments as may be required by the forms specified in those Tables; and
  - to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1-2 of Schedule 4, assessed at any frequency specified therein.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of the most appropriate measures to prevent pollution, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement
- 4.1.8 No condition applies
- 4.1.9. The Operator shall review all monitoring data required by this permit on an annual basis and shall submit a summary report to the Agency within three months of the end of each year.
- 4.1.10 No Condition applies

## 5 Notifications

- 5.1.1 The Operator shall notify the Agency without delay of:
- 5.1.1.1 the detection of an emission of any pollutant which exceeds any limit or criterion in this Permit specified in relation to the pollutant;
  - 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution; unless the quantity emitted is so trivial that it would be incapable of causing significant adverse environmental effect;
  - 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
  - 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution;
  - 5.1.1.5 no condition applies
  - 5.1.1.6 the detection of any significant adverse environmental effects
- 5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:
- 5.1.2.1 information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
  - 5.1.2.2 the more detailed information listed in Part B of that Schedule as soon as practicable thereafter; and such information shall be in accordance with that Schedule.
- 5.1.3 The Operator shall give written notification to the Agency as soon as practicable prior to any of the following:-
- 5.1.3.1 permanent cessation of the operation of part or all of the permitted installation
  - 5.1.3.2 cessation of the operation of part or all of the Permitted Installation, for a period likely to exceed 1 year; and
  - 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2
- 5.1.4 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the site which affects or updates that provided to the Agency as part of the application for this Permit.
- 5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:
- 5.1.5.1 where the Operator is a registered company:
    - any change in the Operator's trading name, registered name or registered office address;
    - any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
    - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
  - 5.1.5.2 where the Operator is a corporate body other than a registered company:
    - any change in the Operator's name or address;
    - any steps taken with a view to the dissolution of the Operator.
  - 5.1.5.3 In any other case:
    - the death of any of the named Operators (where the Operator consists of more than one named individual);
    - any change in the Operator's name(s) or address(es);
    - 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 them being in a partnership, dissolving the partnership;



- 5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:
  - 5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement
  - 5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement
  - 5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement
- 5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:
  - 5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement
  - 5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period

# Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:

*"Application"* means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this Permit.

*"Background concentration"* means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation onto the site, or
- Groundwater quality up-gradient of the installation.
- Surface water quality up-gradient of the site.

*"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned." . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.*

*"Characterisation" as set out in Schedule 1 para 5(5) of the of the Landfill (E&W) Regulations 2002 (SI:2002, No 1559) (as amended) and means gathering all necessary information for the safe disposal of the waste in the long term. The information required is at least that given in Schedule 1 para 5(1) and 5(2) of the 2002 Regulations. Samples of waste to be characterised must be obtained using a sampling plan in accordance with PrEN 14899 and Agency Guidance on the Sampling and Testing of Wastes to meet Waste Acceptance Procedures.*

*"Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit".*

*"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.*

*"Interim Hazardous" means a landfill classified as hazardous until 16<sup>th</sup> July 2004.*

*"The Landfill Regulations" means the Landfill (England and Wales) Regulations SI 2002 No. 1559, as amended by SI 2004 No 1375 and words and expressions defined in the Landfill Regulations shall have the same meanings when used in this Permit, save to the extent that they are specifically defined in this Permit. It shall include future amendments or superseding legislation.*

*"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.*

*"Permitted Installation" means the activities and the limits to those activities described in Table 1.1.1 of this Permit.*

*"PPC Regulations"* means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit. It shall include any future amendments or superseding legislation.

*"Range of conditions"* refers to environmental conditions, such that monitoring for example, for landfill gas is undertaken at a variety of atmospheric pressures (including when it is falling), water monitoring is undertaken in low and high flow conditions and at different times of the year, etc...

*"Sewer"* means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

*"Staff"* includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

*"Year"* means calendar year ending 31 December.

- 6.1.2 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.
- 6.1.3 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 or Guidance for Monitoring Landfill Gas Engine Emissions.
- 6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

# Schedule 1 - Notification of abnormal emissions and significant adverse environmental effects

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

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.

Part C refers specifically to the requirement to notify the Agency of any significant environmental effect as required by the Landfill Regulations and should be used instead of Part B to report such to the Agency.

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 PPC Regulations.

## Part A

Permit Number	
Name of Operator	
Location of Installation	
Location of the emission	
Time and date of the emission	

Substance[s] emitted	Media	Best estimate of the quantity or the rate of emission	time during which the emission took place
	e.g. air		

Measures taken, or intended to be taken, to stop the emission	
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## Part B

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 or harm which has been or may be caused by the emission	
The dates of any unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* Authorised to sign on behalf of Gwynt Cymru Ltd.

## PART C

Nature of significant adverse environmental effect (e.g. Groundwater Pollution, LFG escape)	
Immediate measures taken to prevent further effects from this source	
Further measures taken , or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the significant adverse environmental effect	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	

Name*	
Post	
Signature	
Date	

\* Authorised to sign on behalf of Gwynt Cymru Ltd

## Schedule 2 - Reporting of monitoring data

Parameters, for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

**Table S2: Reporting of monitoring data**

Parameter	Emission point	Reporting period	Period begins
Oxides of Nitrogen (NO <sub>x</sub> )	Gas Engine	1 <sup>st</sup> year 6 monthly thereafter annual	From date of issue of permit
Carbon Monoxide (CO)	Gas Engine	Annual	From date of issue of permit
Total Volatile Organic Compounds (NMVOC'S)	Gas Engine	Annual	From date of issue of permit
Non Methane Volatile Organic Compounds 9NMVOC'S)	Gas Engine	Annual	From date of issue of permit
CO <sub>2</sub>	Gas Engine	Annually	From date of issue of permit
SO <sub>x</sub>	Gas Engine	1 <sup>st</sup> Year 6 monthly thereafter Annual	From date of issue of permit

## Schedule 3 - Forms to be used

Table S3:Reporting Forms		
Media/parameter	Form Number	Date of Form
Air (Engine Emissions)	Reporting Format to be agreed in writing with the Agency	

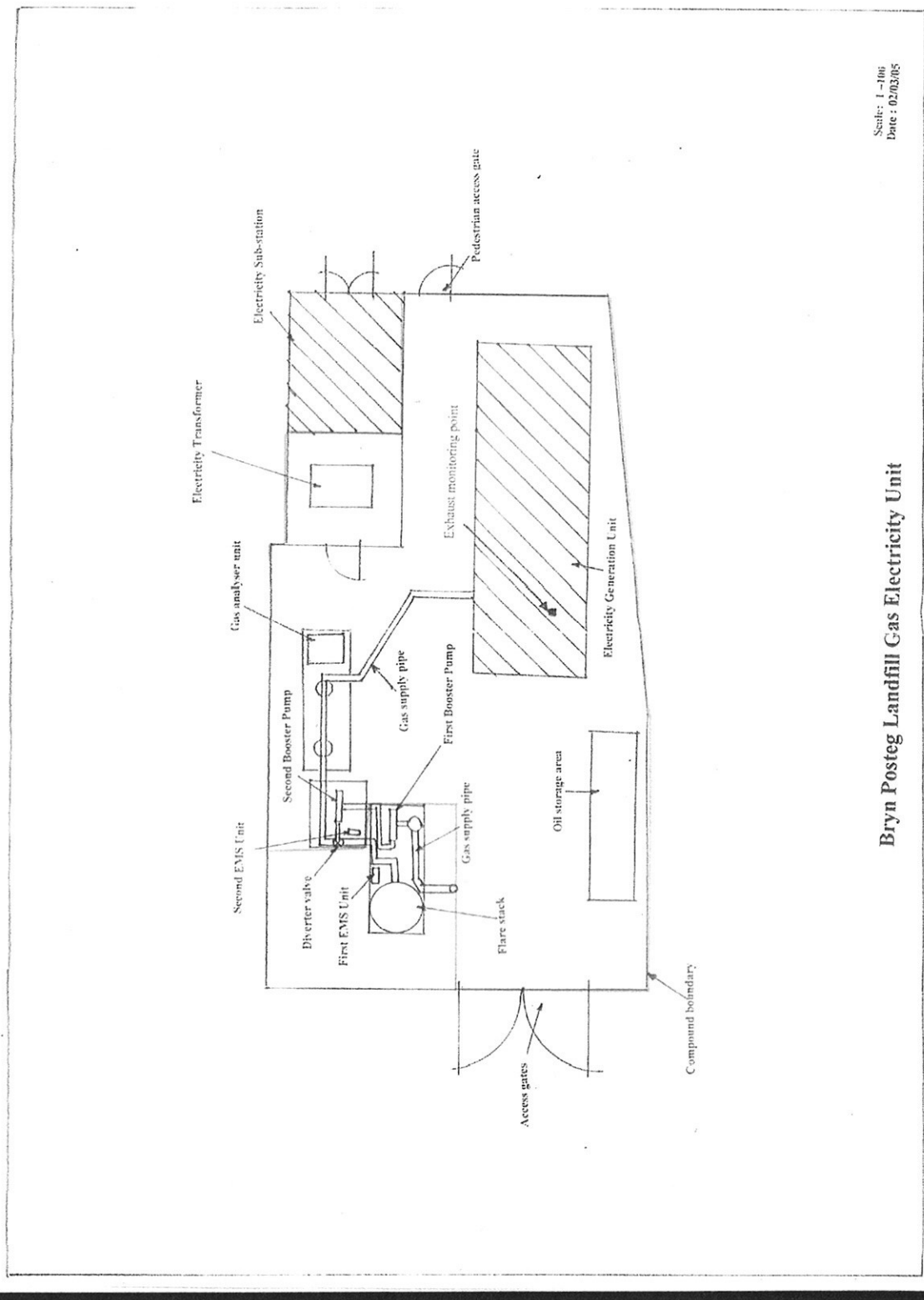
## Schedule 4 - Reporting of performance data

Table S4.1: Annual Production/Treatment	
Production of electricity	MWh

Table S4.2 Performance Parameters	Frequency of assessment	Performance Indicator
Engine Efficiency	Annually	MWh input /MW h Output
Total Oxides of nitrogen (expressed as NO <sub>2</sub> ) Emission	Annually	Kg/MWh
Total Carbon Monoxide emission	Annually	Kg /MWh
Engine efficiency	Annually	MW h Output / m <sup>3</sup> oil used
Down time of Landfill Gas Engines	Annually	Downtime (Hrs) /Available Operational Time (Hrs)



# Schedule 5 - Site Plan



Scale: 1:100  
Date: 02/03/05

Bryn Posteg Landfill Gas Electricity Unit





