

**Natural Resources Wales permitting decisions**

# **Bryn Posteg Landfill – Sundorne Products (Llanidloes) Limited**

## **Decision Document**

DRAFT

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## Glossary of acronyms used in this document

(Please note that this glossary is standard for our decision documents and therefore not all these acronyms are necessarily used in this document.)

BAT	Best Available Technique(s)
BAT-AEL	BAT Associated Emission Level
BREF	BAT Reference Note
CEM	Continuous emissions monitor
CHP	Combined heat and power
CROW	Countryside and rights of way Act 2000
DAA	Directly associated activity – Additional activities necessary to be carried out to allow the principal activity to be carried out
DD	Decision document
EAL	Environmental assessment level
ELV	Emission limit value
EMAS	EU Eco Management and Audit Scheme
EMS	Environmental Management System
EPR	Environmental Permitting (England and Wales) Regulations 2016
EQS	Environmental quality standard
EU-EQS	European Union Environmental Quality Standard
GWP	Global Warming Potential
IED	Industrial Emissions Directive (2010/75/EU)
LHB	Local Health Board
NO <sub>x</sub>	Oxides of nitrogen (NO plus NO <sub>2</sub> expressed as NO <sub>2</sub> )
OPRA	Operator Performance Risk Appraisal
PC	Process Contribution
PEC	Predicted Environmental Concentration
PHW	Public Health Wales
PPS	Public participation statement
PR	Public register
RGS	Regulatory Guidance Series
SAC	Special Area of Conservation
SCR	Selective catalytic reduction
SGN	Sector guidance note

SPA(s)	Special Protection Area(s)
SSSI(s)	Site(s) of Special Scientific Interest
TGN	Technical guidance note
WHO	World Health Organisation

## 1. Our decision

We have decided to grant the Permit for the Bryn Posteg Landfill, operated by Sundorne Products (Llanidloes) Limited

The Permit number is EPR/BU7766IC

We consider that, in reaching this decision, we have taken into account all relevant considerations and legal requirements and that the Permit will ensure that the appropriate level of environmental protection is provided.

## 2. Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the Permit other than those in our generic Permit template.

This document should be read in conjunction with the application & supporting information and the Permit.

## 3. Key issues of the decision

### 3.1 What the Installation does

The Installation is operated by Sundorne Products (Llanidloes) Limited and is a landfill for the disposal of non hazardous waste. The installation also flares landfill gas and treats leachate and discharges the treated leachate to public sewer.

This variation is to allow 333,302 cubic metres of waste that has already been deposited above the previously agreed contours to remain and to allow the landfill to receive a further 116,657 cubic metres of waste to achieve new contours that will infill a deep and steep sided void and allow the site to be fully capped, restored and closed.

### 3.2 Key Issues in the Determination

This variation is in no way a comment on past conduct by the operator and cannot be considered to condone any previous actions by the Operator. This variation is without prejudice to any investigations or proceedings.

This variation replaces the plan which defines the proposed pre-settlement landfilling profiles. The actual waste deposits presently exceed the contours shown on the previously permitted plan, DRWG9. The replacement plan encompasses all deposited waste and allows further deposits, contouring the waste down from below the top of the site to the edge, plan drawing 3456-CAU-XX-XX-DR-G-1817 revision P01 dated 03.09.2019.

In assessing the application to re-define the pre settlement landfilling contours, it was necessary for us to review the characteristics of the site to determine whether or not the proposed change was acceptable. The key issues that we considered were;

- Landfill Stability/slope stability
- Leachate management and control
- Landfill Gas management and Control
- Hydrogeological Risk Assessment
- Financial provision
- Odour, noise and dust

### 3.3 Consultation on the Application

In accordance with our Public Participation Statement and our Working Together Agreements, we consulted on this substantial permit variation application.

We advertised receipt of the Application by a notice placed on our website, which contained all the information required by the EPR and IED, including telling people where and when they could see a copy of the Application. This ran from the 21 August 2018 until the 25 October 2018. We also advised the Bryn Posteg Liaison committee and attended a committee meeting. We placed copies of the application on our Public Register and anyone wishing to see these documents could do so.

At the same time, we sent copies of the Application to the following bodies, which includes those with whom we have “Working Together Agreements”.

- Public Health Wales
- Powys County Council – planning department
- Powys County Council – environmental health department
- Severn Trent Water

These are bodies, whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

Further details along with a summary of consultation comments and our response to the representations we received can be found in Annex 3. We have taken all relevant representations into consideration in reaching our final determination.

### 3.4 Requests for further information

We requested further information for a variety of specific aspects relating to the proposed future operations on the site.

This information was provided as follows:

On 10/08/2018 we received further information relating to Landfill gas risk assessment and stability risk assessment;



On 22/10/2018 we received further information relating to Waste recovery plan, site plans, modelling files, site drainage and hydrogeology data;

On 22/02/2019 we received further information relating to Hydrogeological risk assessment and supporting information;

On 10/05/2019 we received further information relating to Financial Provision, expenditure plan, Leachate management plan and Landfill gas management plan;

On 09/09/2019 we received further information relating to Capping Stability, Waste recovery plan, Pre settlement landfilling contours and final restoration contours.

## 4. The Legal Framework

### 4.1 European Directives

All applicable European Directives have been considered in the determination of the application.

The applicability of the following European Directive has particular relevance to combustion plant applications. We have therefore assessed their relevance to this particular Permit as follows:

- Landfill Directive

NRW is satisfied that this decision is consistent with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources.

## 5. The Regulated Facility

This Application is to operate an Installation which is subject principally to the Environmental Permitting (England and Wales) Regulations 2016 ('EPR') and is subject to the requirements of the Industrial Emissions Directive ('IED').

The Installation is subject to the EPR because it carries out an activity listed in Part 2 of Schedule 1 to the EPR:

- S5.2 Part A (1) (a), The disposal of waste in a landfill.
- Section 5.4 Part A(1)(a)(i), Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day by biological treatment),
- Section 5.4 Part A(1)(a)(ii), Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day by physico-chemical treatment
- Section 5.1 Part B (a) (v), The incineration in a small waste incineration plant with an aggregate capacity of 50 kg or more

Schedule 1 EPR defines 'Installation' to include 'directly associated activities' ('DAA'). At this Installation, the DAAs include leachate management, water discharges to controlled waters and waste treatment.

### 5.1 The site

The Operator submitted a site plan which we consider satisfactory, showing the site of the Installation, its extent, and emission points.

The site plan is included in Schedule 7 of the Permit, and the Operator is required to carry out the permitted activities within the site boundary.

### 5.2 Closure and decommissioning

Having considered the information submitted in the Permit application, we are satisfied that the appropriate measures will be in place for the closure and decommissioning of the Installation.

Permit condition 1.1.1a requires the Operator to have a written management system in place which identifies and minimises risks of pollution including those arising from closure.

At the definitive cessation of activities, the Operator must satisfy us that the necessary measures have been taken so that the entire Installation ceases to pose a risk to soil or groundwater, considering both the baseline conditions and the site's current or

approved future use. To do this, the Operator must apply to us for surrender, which we will not grant unless and until we are satisfied that these requirements have been met.

## **6. Biodiversity, Heritage, Landscape and Nature Conservation**

### **6.1 Sites Considered**

The Installation is within the relevant screening distance criteria of protected habitats.

### **6.2 Habitats Risk Assessment**

As part of this variation there are no new emissions that haven't been considered previously

## **7. Environmental Risk**

### **7.1 Stability Risk Assessment & Monitoring**

The operator undertook a stability risk assessment, this was supported by on site sampling and laboratory testing to confirm the results. The results of which showed satisfactory stability. In reaching this conclusion the reports and data were scrutinised by expert consultants retained by Natural Resources Wales for this specific purpose.

### **7.2 Hydrogeological Risk Assessment/ emissions to soil and groundwater**

The operator undertook a Hydrogeological Risk assessment, the result of which showed satisfactory protection of the environment. The permit requires ongoing monitoring to ensure appropriate standards are maintained.

The landfill liner in place to protect the soil and groundwater remains unaffected by this variation, as does the permitted depth of leachate within the site. The permit retains the previous environmental monitoring requirements to ensure that the integrity of the containment is confirmed.

### **7.3 Landfill Gas Risk Assessment and management**

The landfill gas risk assessment and management plans have been updated as supporting information to this variation application. These documents were assessed and found to be satisfactory.

This variation is considered to be the most practical and pragmatic way of completing the site and fully capping and controlling landfill gas in the shortest practical timeframe.

The conditions in the permit continue to require landfill gas to be collected and controlled and for ongoing confirmatory monitoring and reporting.

### **7.4 Assessment of Impact on Air Quality**

There will be no changes to the point source emissions to air from the Installation as a result of this variation.

### **7.5 Emissions to surface water**

There will be no changes to the emissions to surface water as a result of this variation. However, in order to ensure that surface waters are protected and that surface water management within the site is of an appropriate standard we have added two improvement conditions (IC10 and IC11).

### **7.6 Emissions to sewer**

There will be no change to the emissions to the public sewer as a result of this variation.

### **7.7 Odour**

There are no new waste types being accepted at the Installation and all current practices and procedures will be adhered to following the changes. The operator has an odour management plan and the permit has conditions to ensure adequate odour management and control.

We are aware of the site history of odour issues. This variation is considered to be the most practical and pragmatic way of completing the site and fully capping so that it can be closed and therefore containing odours in the shortest practical timeframe.

## **7.8 Noise**

The variation is not changing the practices or procedures with respect to noise. The remaining landfilling proposed being in a “void” below the existing highest landfilled areas.

## **7.9 Efficient use of raw materials, water and energy**

There will be no changes to the way that energy, water and raw materials will be used on-site following the changes made by this variation.

# **8. Operating Techniques**

## **8.1 Waste Acceptance and achieving appropriate waste profiles**

The operator has outlined procedures to be drawn up and followed in order to ensure that the remaining waste imports do not exceed the updated permitted profiles. The permit includes a pre-operational condition requiring that procedure to be completed and approved before any more waste is imported. In addition, the permit requires the site to be surveyed every six months, in order to ensure that the waste profiles are appropriately monitored.

# **9. The Permit Conditions**

## **9.1 Incorporating the application**

We have specified that the Applicant must operate the Installation in accordance with the descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in table S1.2 “Operating Techniques” in the Permit and are therefore directly enforceable.

## **9.2 Emission Limits**

Incidental to the permit variation applied for we have taken this opportunity to update the emission limit for mecoprop, this simply reflects new guidance. There are no other

changes to any of the emission limits listed in the original Permit as part of this variation.

### **9.3 Monitoring**

Incidental to the permit variation applied for we have taken this opportunity to update the monitoring requirements for the biomass boiler, this reflects new guidance. There are no other changes to any of the monitoring arrangements listed in the original Permit as part of this variation.

### **9.4 Reporting**

There are no changes to any of the reporting arrangements listed in the original Permit as part of this variation.

## **10. Operator Competence**

### **10.1 Management System, compliance and conviction**

The Applicant has stated in the Application that they operate a Management System. While the documentation appears satisfactory, it has been clear from the role of NRW as regulators of the site, that the operator does not adequately follow, their systems. The operator has repeatedly been deemed by NRW to be operating the site in a poor and unsatisfactory manner. This is clearly identified in a long list of compliance assessment reports.

This history of non compliances with the permit has led to the operator/site being classified as band F. This is the lowest band and leaves this site as the worst performing site in Wales.

It is also demonstrated by the enforcement action that has been taken by NRW including the issue of Notices, the most recent being served on 5 December 2019 relating to leachate levels and groundwater trigger limits. And the ongoing investigations into serious breaches and other offending. As well as a Prosecution in relation to breaches at Bryn Posteg to which the Company pleaded guilty at Merthyr

Tydfil Magistrates' Court and were fined £35,400 and ordered to pay £20,000 in costs in September 2019.

However, the landfill is presently in an unacceptable and unsustainable state. This is due to the breach of permit conditions by the Operator as they have brought too much waste on to the site. This breach forms part of an ongoing investigation. The permit was suspended in January 2018 when it became clear the level of the breaches that had occurred. This meant that the landfill was stopped from accepting further waste at a time when it was incomplete although it should have already been in "closure" by this point. It presently has a very steep internal waste slope and deposited wastes which are uncapped and can not be capped until acceptable profiles are achieved. This situation also means that leachate, landfill gas, surface water and other operational features can not be satisfactorily controlled.

The documentary evidence required by NRW as part of the variation, to address the concerns that led to the permit suspension, in relation to issues such as leachate, gas, slope stability, as well as the additional requirements of the permit and recent enforcement action has reduced the risk to the environment. It is therefore considered the most pragmatic, practicable and least environmentally damaging approach is to issue the variation. This will result in the landfill being filled, capped and closed in the shortest practical timeframe. While not specifically relating to this permit variation, Natural Resources Wales did give consideration to all other potential options to finish the site and restore it. After consideration, this option was considered the most likely to minimise both impacts on the surrounding environment and minimise the remaining time that the landfill will remain operational.

The granting of this variation is in no way a comment on past conduct and can at no point be considered as condoning the action of the operator. In reaching this decision, NRW has simply looked at the existing situation that needs to be resolved and looked at the proposal from the operator and reached a decision on that proposal. The granting of this variation is without prejudice to any ongoing investigations or proceedings.

## 10.2 Financial Provision

The Operator has proposed suitable financial provision. This will be incorporated into a separate legal agreement to ensure that suitable landfill aftercare can be provided into the future. Each element of the financial provision was reviewed and agreed in reaching an appropriate figure. The provision agreed rises to £2,980,517 from the previous provision of £1,953,153.

There is no known reason to consider that the Operator will not be financially able to comply with the Permit conditions. The decision was taken in accordance with EPR RGN 5 on Operator Competence.

### 10.3 OPRA

We are satisfied that the Applicant's submitted Operator Performance Risk Appraisal ('OPRA') profile is accurate. The OPRA score is 177 and will be used as the basis for subsistence and other charging, in accordance with our Charging Scheme. OPRA is Natural Resources Wales method of ensuring application and subsistence fees are appropriate and proportionate for the level of regulation required.



## ANNEX 1: Consultation Responses

Consultation was conducted as detailed in the “Consultation on the application” section above. Below are tables which summarise responses received together with how they have been addressed in the determination process. For specific statutory bodies, we have summarised their specific responses in the tables below. No responses were received from members of the public.

### 1) Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from Powys Teaching Health Board / Public Health Wales	
Summary of issues raised:	Summary of action taken / how this has been covered
We have no grounds for objection based upon the public health considerations contained within the application	N/A
We recommend that any consent granted be subject to conditions, specifically robust emissions management plans (dust, odour, landfill gas and noise), strict waste acceptance and handling criteria and provision of an accredited environmental system (EMS).	The draft permit includes conditions which address these points as far as is possible. Management systems are needed but no legal requirement for these systems to be accredited.

<b>Response Received from Hafren Dyfrdwy</b>	
<b>Summary of issues raised:</b>	<b>Summary of action taken / how this has been covered</b>
COD is an ongoing concern and Hafren Dyfrdwy need predicted treated leachate strength and load details	This needs to be agreed between the site operator and Hafren Dyfrdwy.
Hafren Dyfrdwy request raw data of flow meter discharge from Bryn Posteg Landfill.	This needs to be agreed between the site operator and Hafren Dyfrdwy.
To confirm the current discharge Consent 006247V permits a discharge of a maximum daily volume of 180m <sup>3</sup> and not 200 m <sup>3</sup> as stated in the proposal document (leachate). The discharge rate limit is indeed 3 litres per second.	This consent is between the site operator and Hafren Dyfrdwy.
Hafren Dyfrdwy have not received any communication directly from Sundorne regarding their proposal to increase incoming waste loads at Bryn Posteg. Furthermore, HD have not received any notification on how the leachate composition may change as well as discharge volumes.	The Operator needs to liaise directly with Hafren Dyfrdwy regarding all details of their discharge of treated leachate.

## 2) Consultation Responses from Members of the Public and Community Organisations

A number of the issues raised during the consultation process are outside Natural Resources Wales remit in reaching its permitting decisions. Specifically questions were raised which fall within the jurisdiction of the planning system such as issues relating to traffic movements.

Guidance on the interaction between planning and pollution control is given in PPS23 / Planning Policy Wales. It says that the planning and pollution control systems are separate but complementary. We are only able to take into account those issues, which fall within regulatory scope of the Environmental Permitting Regulations.

### c) Representations from Individual Members of the Public

#### Response Received

Brief summary of issues raised:	Summary of action taken / how this has been covered
<p>Operator consistently and blatantly breaching the permit such as the height of the landfill/ overtipping.</p>	<p>Natural Resources Wales are fully aware of the issues with compliance which have occurred at this site and have significant concerns regarding operator competency.</p> <p>Action has been taken, with further investigation on-going and a large number of enforcement notices served.</p> <p>Natural Resources Wales invests a large resource to monitor permit compliance and take necessary action.</p> <p>Due to our concerns regarding the Operator, this permit variation contains additional conditions and requirements to provide Natural Resources Wales with further information to assess ongoing compliance.</p> <p>See decision document section 10.1 operator competence</p>
<p>Previous history of the operators polluting local watercourses, including court cases.</p>	<p>Natural Resources Wales are fully aware of the issues with compliance which have occurred at this site and have significant concerns regarding operator competency.</p> <p>Action has been taken, with further investigation on-going and a large number of enforcement notices served.</p> <p>Natural Resources Wales invests a large resource to monitor permit compliance and take necessary action.</p> <p>Due to our concerns regarding the surface water discharges to local watercourses, this permit variation contains additional requirements in the form of improvement conditions</p>

	<p>10 and 11 which require the operator to supply details of the surface water infrastructure and how the infrastructure will improve in the future with details of operational performance. The permit continues to set protective limits on emissions from the site and these will continue to be regulated.</p>
<p>Previous history and ongoing smells from the landfill. Smells have been bad/extreme and widespread, continuing to be bad in recent months, sometimes so bad to cause nausea. Affecting driving on local roads and enjoyment of local homes and gardens.</p>	<p>Natural Resources Wales are fully aware of the issues with compliance which have occurred at this site and have significant concerns regarding operator competency.</p> <p>Action has been taken, with further investigation on-going and a large number of enforcement notices served.</p> <p>Natural Resources Wales invests a large resource to monitor permit compliance and take necessary action.</p> <p>Due to our concerns regarding the odours we considered all other potential options to finish the site and restore it. After consideration, this option was considered the most likely to minimise both odours and minimise the remaining time that the landfill will remain operational. Options of removing capping and re-excavating previously deposited wastes could generate substantially increased odours while these operations take place.</p> <p>See decision document section 10.1 operator competence</p>
<p>That filling the site if this variation were to be approved, would entail a further 5 years of landfilling of wastes</p>	<p>The proposed remaining volume is 116,657m<sup>3</sup>, this would equate to approximately 19 months at maximum capacity.</p>
<p>The road system between the A470 and the site is not suitable for the large articulated lorries travelling to</p>	<p>This matter is outside of the scope of the environmental permit. It may be within the scope of the planning consultation.</p>

and from the site. Variation would increase traffic	
Concern about leaching of liquid from the landfill into local rivers and potential impact on water supply	The landfill construction incorporates a lining system to prevent leakages as well as a monitoring system to ensure compliance. These are addressed in the application documents and in the permit.
Concern about leaching of liquid from the landfill into groundwater and potential impact on water supply at boreholes within a few miles of the site	The landfill construction incorporates a lining system to prevent leakages as well as a monitoring system to ensure compliance. These are addressed in the application documents and in the permit.
Inappropriate for a small town causing social and environmental issues	This matter is outside of the scope of the environmental permit. It may be within the scope of the planning consultation.
Nearby houses Blighted	This matter is outside of the scope of the environmental permit. It may be within the scope of the planning consultation.
Health effects of toxic fumes	Hazardous wastes are not accepted at the site. And satisfactory controls are in place to collect and burn or flare landfill gas. We have consulted with Powys Teaching Health Board / Public Health Wales. The conclusion is that adverse health effects are not considered a risk. The permit includes conditions which allow Natural Resources Wales to regulate the site suitably.
Should be made to remove the overtipping at their own expense	This is not for consideration as part of this variation application as this application is determined on its merits separately from any enforcement which could arise. The issue of the overtipping is being investigated separately by Natural Resources Wales.  Separate from this decision, NRW did consider what other options were available, the option of removing the overtipping could generate substantially increased odours and cause a series of other potential impacts.

<p>Concern about future regulation of the scale of the landfilling/ prevent overfilling from happening again in the future.</p>	<p>Natural Resources Wales are fully aware of the issues with compliance which have occurred at this site and have significant concerns regarding operator competency.</p> <p>Action has been taken, with further investigation on-going and a large number of enforcement notices served.</p> <p>Natural Resources Wales invests a large resource to monitor permit compliance and take necessary action.</p> <p>Due to our concerns regarding the Operator, this permit variation contains additional conditions and requirements to provide Natural Resources Wales with further information to assess ongoing compliance. This includes a requirement for the operator to survey the waste tipping profiles every six months (permit condition 3.7.3) and for them to produce a procedure for ensuring that the remaining waste disposal deposits do not exceed the agreed profiles (pre operational measure 2).</p> <p>This is subject to an ongoing investigation</p>
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