

Natural Resources Wales permitting decisions

Morfa Non-Hazardous Landfill – Tata Steel UK Limited

Decision Document

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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 _x	Oxides of nitrogen (NO plus NO ₂ expressed as NO ₂)
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 Morfa Non-Hazardous Landfill, operated by Tata Steel UK Limited

The Permit number is EPR/BV7311IE

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.

Unless the decision document specifies otherwise we have accepted the Applicant's proposals.

3. Key issues of the decision

3.1 What the Installation does

The Installation is operated by Tata Steel UK Limited, the whole landfill complex comprises; non-hazardous landfill, hazardous landfill and a closed unlined landfill is maintained. The site has been operational since 1973. This variation is concerned only with the non-hazardous landfill.

The Installation accepts small quantities of biodegradable wastes which are landfilled in dedicated cells (bio cells), the main waste input into the landfill however, is non-hazardous industrial waste from the adjacent steelworks, this is landfilled in dedicated non-hazardous cells. Currently Bio-cell B and non-hazardous cell 2 are actively accepting waste.

The cells have been continually monitored to ensure void space is utilised effectively and a complete infilling history can be maintained. Based on the data the current bio cell B is close to capacity, however there is a significant capacity remaining in non-hazardous cell 2.

Based on this, and a thorough options appraisal, this variation will extend bio cell B into the adjacent full non-hazardous cell 1. The currently infilled waste in this cell will be removed. The waste mainly consists of slag waste; from this useful aggregates and metals can be recovered and re-used in the steelworks which will offset the consumption of raw materials. Other material can be used for construction within the landfill itself.

Full containment systems will be placed within the newly utilised area before any biodegradable waste is placed in the cell.

3.2 Key Issues in the Determination

The key issues arising during this determination were;

- Landfill Stability
- Leachate control
- Financial provision

We therefore describe how we determined these issues in more detail in this document.

3.3 Consultation on the Application

The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements.

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 for 4 weeks from the 25th January 2019 until the 22nd February 2019. 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
- Neath Port Talbot Council – planning department
- Neath Port Talbot Council – environmental health department
- Mid & West Fire & Rescue Service

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 on the financial provision for the site. This was assessed in detail and further clarification was sought. We are satisfied with the proposed financial provision.

4. Operator

We are satisfied that the Operator is the person who will have control over the operation of the facility after the grant of the Permit. The decision was taken in accordance with EPR RGN 1 “Understanding the meaning of Operator”.

5. The Legal Framework

5.1 European Directives

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

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

- **Industrial Emissions 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.

6.The Regulated Facility

This Application is to operate an Installation which is subject principally to the Environmental Permitting 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.

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.

6.1 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.

6.2 Site Condition Report

The site has a Site protection and monitoring programme (SPMP), the operator maintains this programme in relation to all areas of the landfill, this is regularly reported on and is kept up-to-date. Full details of additional leachate and gas monitoring is detailed later in the document in Section 8.

6.3 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.

7. Biodiversity, Heritage, Landscape and Nature Conservation

7.1 Sites Considered

The Installation is within the relevant screening distance criteria of protected habitats. A full assessment of the Application and its potential to affect the designated site has been carried out as part of the permitting process. We consider that the Application will not affect the features of the designated sites listed below.

The following European protected sites (i.e. Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar) are located within 10km of the Installation:

- Cefn Cribwr Grasslands

- Kenfig National Nature Reserve

The following Special Scientific Interest sites located within 2km of the Installation:

- Margan Moors
- Eglwys Nunydd Reservoir
- Kenfig National Nature Reserve

Several non-statutory Local Wildlife Sites (LWS), National Nature Reserves (NNR), Local Nature Reserves (LNR) and Ancient Woodlands are located within 2km of the Installation.

7.2 Habitats Risk Assessment

As part of this variation there are no new emissions that haven't been considered previously. There are no emissions to air from the Installation, all water/leachate is captured and retained on-site so there are no emissions to either surface water, sewer or land, therefore no further assessment has been carried out in respect of European protected sites, national sites (SSSI) or non-statutory sites.

Even though there are no point source emissions from site, the Operator carried out detailed assessments as part of the original Permit application (2003). One of the assessments considered air quality on the adjacent SAC – Kenfig NNR. This assessment considered dust from the site being deposited on the SAC. The survey carried out showed that the maximum deposition was 115mg/m²/day, the lower boundary of nuisance limit is 200mg/m²/day and therefore the impact is below this.

However, it was noted on further investigation that only around 10% of the dust deposited on the SAC originated from the landfill itself, so the actual impact from the site is a lot lower than shown above.

Similar conclusions were reached for other habitat sites, where the impact of dust deposition is negligible and to date no impact on the sites has been recorded.

The risk of dust emissions are low as long as adequate controls are in place. To ensure that this remains the case, Tata's environmental department will carry out more frequent dust monitoring if the release of dust is observed. the data will then be compared against the 200mg/m²/day threshold and if it looks like this threshold is going to be breached, then working practices will be modified or the work stopped all together.

8. Environmental Risk

8.1 Stability Risk Assessment & Monitoring

The operator undertook a stability risk assessment, the results of which showed satisfactory stability. In addition the operator has proposed that as part of the monthly landfill monitoring, a visual inspection of the waste slopes will be carried out during initial placement of the waste within the newly extended bio cell.

8.2 Hydrogeological Risk Assessment

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.

8.3 Landfill Gas Risk Assessment

Additional landfill gas monitoring will be carried out as new biodegradable waste is deposited. The gas wells will be constructed and located in accordance with the current approved techniques.

8.4 Assessment of Impact on Air Quality

There will be no point source emissions to air from the Installation.

8.5 Emissions to surface water

There will be no emissions to the surface water, all water/leachate will be retained on-site.

8.6 Emissions to sewer

There will be no emissions to the public sewer, all water/leachate will be retained on-site.

8.7 Emissions to soil and groundwater

There will be no emissions to soil or groundwater as a result of the operation of the Installation, all activities will be carried out within a sealed area

8.8 Odour

There will be no increased impact of odour from the site based on the changes made by this variation. There are no new waste types being accepted at the Installation and all current practices and produces will be adhered to following the changes.

8.9 Noise

The Operator carried out a review of the noise from the site both existing and following the changes brought about by this variation. The assessment concluded that the impact of noise from the Installation will be no different from that is already existing for current landfilling and capping activities.

8.10 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.

9. Operating Techniques

We have reviewed the techniques used by the Operator and have compared these with those set out in Sector Guidance Note S5.02: how to comply with your environmental permit - additional guidance and concluded that the operating techniques conform with BAT.

9.1 Waste Acceptance

The landfill accepts small quantities of biodegradable wastes solely from the Tata Port Talbot Steelworks, but the main bulk of the waste is non-hazardous wastes from the steelworks, which is deposited in separate cells. There will be no new types of waste deposited at the landfill as part of this variation and therefore the currently accepted waste acceptance procedures are still valid.

10. The Permit Conditions

10.1 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.

10.2 Emission Limits

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

10.4 Monitoring

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

10.5 Reporting

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

11. Operator Competence

11.1 Environmental Management System

The Applicant has stated in the Application that they operate an Environmental Management System (EMS) certified under ISO14001, a copy of the certificate confirming this was provided as part of the Application.

To ensure that the management system proposed by the Applicant sufficiently manages the residual risk of accidents, Permit condition 1.1.1a requires the implementation of a written management system which addresses the pollution risks associated with, amongst other things, accidents.

11.2 Relevant convictions

Our Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The Operator satisfies the criteria in EPR RGN 5 on Operator Competence.

11.3 Financial Provision

The Operator has proposed suitable financial provision.

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.

11.4 OPRA

We are satisfied that the Applicant's submitted Operator Performance Risk Appraisal ('OPRA') profile is accurate. The OPRA score is 125 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 Abertawe Bro Morgannwg University Health Board (incorporating comments from Public Health Wales) - response received – 22nd March 2019	
Summary of issues raised:	Summary of action taken / how this has been covered
1. No Objections raised – PHW recommended that any consent granted be subject to conditions, specifically these should include robust emissions management plans (dust, odour, vermin and noise), strict waste acceptance and handling criteria.	1. No action required – the Installation currently has all of the mentioned management plans and sufficient procedures are in place.

We didn't receive any responses from Mid & West Fire & Rescue Service and Neath Port Talbot Council – Planning Department & Environmental Health Department.