

Natural Resources Wales Permitting Decisions

Wynnstay Group PLC (Llysonnen Mill)

Decision Document

Application for a Normal Variation

The application number: PAN-022943

The permit variation number: EPR/EP3034GS/V005

The applicant / operator: Wynnstay Group PLC

The Installation is located at: Wynnstay, Llysonnen Animal Feed Mill, Travellers Rest, Carmarthen, Dyfed, SA31 3SG

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.

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

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1. Executive summary

1.1. Application summary

The operator is applying to vary their permit to retrospectively incorporate two additional point source emissions to air (emission point A5 from the main dust unit emission and emission point A6 from the blend bins emission). Both emission points have cartridge filters fitted.

1.2. Our decision

We have decided to issue the permit variation for Llysonnen Mill operated by Wynnstay Group P.L.C.

We consider in reaching that 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. Receipt of the application

The application was received on 11/08/2023. In order for us to be able to consider the application duly made, we needed more information. We requested the following:

- Model input files to support the air dispersion modelling report submitted;
- Additional information about the processes which give rise to the two additional point source emissions to be added to the permit;
- A revised Site Emissions Point Plan;
- A Process Flow Diagram (PFD);
- Clarification on Confidentiality;
- Revised F1 Application Form with declaration signed by a relevant person.

A letter requesting this information was sent to the applicant on 14/09/2023. Upon receipt of this information, on 14/09/2023, we were able to consider the application duly made. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

3. Confidential information

The applicant made a claim for no claim for commercial confidentiality, and we have not received information in relation to the application that appears to be confidential in relation to any party.

4. Legislation

The variation will be issued, under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 (as amended) (EPR). The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that the decision on this application is consistent with its general purpose of pursuing the sustainable management of natural resources (SMNR) in relation to Wales and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in issuing the variation a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions. NRW is satisfied that this decision is compatible 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.

As the EPR regulator in Wales, NRW are required to determine any duly made permit application. This means that we must decide either to grant, or to refuse the variation based upon an objective assessment of the proposals against the detailed legal requirements of EPR. Our public participation statement¹ gives more information on what can, and cannot, be taken into account when making our permitting decision.

¹ [Natural Resources Wales / Public participation: how you can take part in our permit and licence consultations](#)

The application, and this decision document, only considers the permitting of the facility under EPR as described throughout the document. We only assess the installation and its impacts and cannot take into consideration indirect impacts which are not as a direct result of activity within the installation boundary.

Any proposed development and wider associated activities will be required to be compliant with all relevant and applicable law, for example, environmental law, health and safety law, planning law. This other legislation acts largely independently of EPR (although they may be inter-related). Such other matters are beyond both the scope of this document, and of our regulatory remit and expertise and are not relevant to our EPR permitting decision. Ensuring compliance with all other regulation and obtaining any required consents (such as planning permission) is the responsibility of those undertaking the development and is regulated by the relevant appropriate authority for each.

5. Consultation

No consultation has been carried out on this application as this is not required for normal variations for sites which are not of High Public Interest. This decision was made in accordance the EPR, our statutory Public Participation Statement² and our Regulatory Guidance.

6. Requests for information

No requests for further information were required during the determination process.

7. The Installation

7.1. The permitted activities

The installation is located at Travellers Rest, Carmarthen covering an area of approximately 1.6 hectares with the centre of the site located at National Grid Reference SN 38295 19579.

The installation utilises bulk raw materials of vegetable origin to produce pellets or blends of meals for animal feed. Raw materials are accepted at the site in dry and

² [Natural Resources Wales / Public participation: how you can take part in our permit and licence consultations](#)

liquid forms with dry materials being stored in bulk silos and liquids in blended storage tanks. Filters are used at the intake points to reduce the potential for atmospheric emissions during delivery.

The milling process blends, grinds, mixes and extrudes into pellets (if required) the raw materials which are blended to specific formulas (steam, molasses and liquids are added if necessary).

Pelletising of the mixes into pellets, nuts or rolls occurs through one of two processing lines. After the feed, has been formed in the presses air is drawn down to cool the feed using one of two coolers. Air from each cooler is expelled through cyclone abatement systems which are monitored for particulate emissions on an annual basis. The finished product is transferred for bulk storage and subsequent sale.

The main process is also supported by ancillary activities which include steam generation, compressed air generation, effluent treatment, cleaning and vehicle washing.

All processes which are likely to produce dust and noise emissions are undertaken in buildings or sheltered units fitted with dust suppression systems where appropriate. A management system is in place that covers all aspects of site operations which could impact on the environment.

The regulated facility is currently an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations:

- Section 6.8 Part A(1)(d)(ii) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed (ii) only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day.

7.2. Changes to the installation

The operator is applying to vary their permit to retrospectively incorporate two existing point source emissions to air (the main dust unit emission and blend bins emission) into the permit.

The last permit variation was issued on 26/01/2022 following the publication of the revised Best Available Techniques (BAT) Reference Document (BRef) for the Food,

Drink and Milk Industries. The associated BAT conclusions were published on the 4 December 2019 in the Official Journal of the European Union. The variation incorporated the changes required by the Industrial Emissions Directive following a statutory review of permits in the Food, Drink and Milk Industries sector. The deadline to meet BAT was 4 December 2023. As part of this variation, the tables presented within Schedule 3 and Schedule 4 referring to monitoring and reporting requirements prior to 3 December 2023 have been removed, as they no longer apply.

The variation also corrects a typographical error within Table S1.1 and removes reference to the storage of red diesel, which the applicant has advised no longer takes place on site. Table S1.3 has also been updated to reference IC6 as complete.

There are no other changes to the Permit as part of this variation.

8. Operation of the installation

8.1. Environmental Management System

The applicant has stated in the application that they will implement an updated Environmental Management System (EMS) that incorporates the changes to the permitted activities, and meets the requirements for an EMS in our “How to comply with your environmental permit” guidance³.

The applicant has submitted a summary of the EMS with their application.

We have reviewed the application and are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

8.2. Operating techniques

Installation activities and assessment of Best Available Techniques

The applicant has described the proposed equipment and operating techniques associated with the changes proposed to the Installation, and has compared these against the relevant Best Available Techniques conclusions (BATc) which for an

³ [Natural Resources Wales / Guidance to help you comply with your environmental permit](#)

installation of this type is Best Available Techniques (BAT) Reference Document (BRef) for the Food, Drink and Milk Industries, as published in the Official Journal of the European Commission Article on 4 December 2019.⁴

We have reviewed the techniques proposed and consider them in line with them to represent BAT at this installation.

The applicant has submitted an updated Site Protection and Monitoring Programme (EAP06 SD03 spmp carmarthen V2) and Fugitive Emissions Analysis report (eap05 SD03 Fugitive Emissions analysis Sep23) which assess potential fugitive emissions from the site and details appropriate mitigation and monitoring measures to be implemented on site to minimise any potential impacts.

We have specified that the applicant must operate the permit in accordance with descriptions in the application. Table S1.2 within the updated permit references operating technique documents which contain information on how the operator will apply BAT at the installation.

9. The Site

9.1. Site Plan

The applicant has provided an updated site plan which we consider is satisfactory, showing the extent of the site of the facility and all emission points, including the new emission points to atmosphere.

The update plan will be included in the permit and the operator will be required to carry on the permitted activities within the site boundary.

9.2. Site Condition Report

The proposal does not include the addition of any land and so a Site Condition Report was not required to support this application.

⁴ [FDM BAT conclusions](#)

10. Environmental Risk Assessment

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of emissions from the Installation on human health and the environment and what measures we are requiring ensuring a high level of protection.

In line with our guidance, the applicant has provided an environmental risk assessment with the application which identifies and the sources of key risks from the variation, possible pathways and receptors. This risk assessment and further assessments provided by the applicant and/or completed by NRW will be discussed in further detail below.

10.1. Assessment of impact on air quality

This section of the decision document deals primarily with the dispersion modelling of emissions to air from the two additional emission sources to air and their impacts on local air quality.

The applicant has assessed all of the Installation's emissions to air (including the two additional particulate emission points to air (LEV02 from the Main Dust Unit (A5) at top of Mill and LEV22 from the Blend Bin extraction (A6) at top of Bulk Loading Area), against the relevant air quality standards, and the potential impact upon human health in line with relevant guidance⁵. These assessments predict the potential effects on local air quality from the Installation's stack emissions.

Emission points LEV02 (Main Dust Unit (A5)) and LEV22 (Blend Bin extraction (A6)) are identified within the modelling as A6 and A7 respectively and have been modelled by the applicant with the previously identified emission points A1 to A4 in order to assess their potential impacts on human health and habitats. Modelling of predicted process contributions (PCs) at a number of identified human and habitat receptors has been undertaken using BREEZE AERMOD software for comparison against relevant environmental assessment levels (EAL's), critical loads (CLo's) and the Air Quality

⁵ [Air emissions risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit)

Standards Regulations 2010 (AQS) Limit Values. The submitted modelling included impacts from terrain and buildings on dispersion and used five years of observed hourly meteorological data measured at Pembrey Sands by the Met Office.

Table 3-3 in the submitted report indicates that emission points A6 and A7 will only emit particulates to atmosphere. Therefore, inclusion of the additional particulate (PM₁₀ and PM_{2.5}) emission points A6 and A7 will result in no increases in impacts at human or habitat receptors of oxides of nitrogen (NO_x and NO₂) or sulphur dioxide (SO₂) with respect to any original air quality impact assessment(s) submitted in support of the existing permit EPR/EP3034GS.

The applicant notes that while the submitted modelling of emissions from previously identified emission points A1 and A2 (which are both from Cyclone exhaust pellet cooling sources), have been undertaken assuming the maximum Emission Limit Value (ELV) of 50mg/m³ for Particulate Matter, this has been reduced to 20mg/m³ from December 4th 2023. Predicted impacts of particulates at human receptors have not been assessed at the lower emission concentrations of A1 and A2 in the submitted report.

As the additional points A6 and A7 only emit particulates, our review of the submitted assessment only considered impacts of particulate matter (PM) at sensitive human receptors as all other impacts will have been reviewed previously in support of the original permit application.

The modelling was reviewed by our technical specialist Air Quality and Noise (AQN) Team. While our check modelling broadly agreed with the conclusions within the applicant's assessment report, Table C-1 in the submitted report presenting predicted annual average PM₁₀ process contributions (PCs) and predicted environmental contributions (PECs) at human receptors appears to have used PM_{2.5} background concentrations when calculating the annual PM₁₀ PEC at human receptors. PEC's from our check modelling indicate that the maximum annual PM₁₀ PEC at human receptors is 38% of the associated AQS limit value.

The submitted report (Section 6) stated that where the 90.41st percentile of short term (24 hourly average) predicted PC's of PM₁₀ at human receptors exceed 10% of the associated AQS limit value, the PEC does not exceed the limit value.

While our check modelling broadly agreed with this conclusion, Table C-2 in the submitted report presenting predicted the predicted 90.41 percentile of twenty-four hour average PM₁₀ concentrations also used PM_{2.5} background concentrations to calculate PECs. PEC's² from our check modelling indicate that the maximum 90.41st percentile of twenty-four hourly average PM₁₀ PECs at human receptors is 63% of the associated AQS limit value.

The submitted report (Section 6) states that where the annual predicted PC's of PM_{2.5} at human receptors exceed 1% of the associated AQS limit value, the PEC does not exceed the limit value.

The submitted report predicted annual average PM_{2.5} PCs and PECs at human receptors appears to have used PM₁₀ background concentrations when calculating the annual PM_{2.5} PEC at human receptors. PEC's from our check modelling indicated that the maximum annual PM_{2.5} PEC at human receptors is 53% of the associated AQS limit value.

In addition to the submitted scenario, the AQN Team also modelled two additional scenarios. One assumed to reflect that submitted in support of the original application, i.e. emission sources A1 to A4 inclusive; and another scenario reflecting current operations as of the 5th December 2023, i.e. A1 to A4 inclusive plus A6 and A7, following a reduction in particulate ELVs for emission points A1 and A2.

While our check modelling for current operations prior to 5th December 2023 broadly agreed with the submitted modelling predictions and indicates an increase in both PM₁₀ and PM_{2.5} impacts at human receptors relative to those predicted for emission points A1 to A4 only, the scenario for all six emission points following the particulate ELV reduction for points A1 and A2 indicates predicted PCs and PECs for PM₁₀ (and by inference PM_{2.5}) at all human receptors will be less than that predicted for just the

four emission points A1 to A4 inclusive, operating at the existing ELVs which are currently permitted.

Errors identified in the submitted report relating to the incorrect use of background when calculating particulate PECs did not however impact our overall conclusions.

In conclusion, the way in which the applicant used dispersion models, its selection of input data, use of background data and the assumptions it made, have been reviewed by Natural Resources Wales (NRW) specialist AQN team, to establish the robustness of the applicant's air impact assessment. The output from the model has then been used to inform further assessment of health impacts. We are therefore able to accept the applicants report as their assumptions underpinning the model have been checked and are reasonably precautionary.

Based upon the information in the application and the measures that will be imposed by the permit we are satisfied that the appropriate measures will be in place to protect air quality for the environment and human health.

10.2. Assessment of impact to surface and ground water

There are no changes to direct discharge to surface waters or ground water as part of this variation application, therefore no assessment of impact has been undertaken as part of this variation.

10.3. Emissions to sewer

There are no changes to direct discharge to sewer as part of this variation application, therefore no assessment of impact has been undertaken as part of this variation.

10.4. Fugitive emissions

Processes which are likely to produce potential fugitive emissions are undertaken within buildings or sheltered units. As the only changes proposed under this variation are to include two additional point source dust emissions, the risk of impact from additional fugitive emissions can be considered negligible.

That said, the applicant has submitted an updated Site Protection and Monitoring Programme (EAP06 SD03 spmp carmarthen V2) and Fugitive Emissions Analysis report (eap05 SD03 Fugitive Emissions analysis Sep23) which assess potential fugitive emissions from the site and details appropriate mitigation and monitoring measures to be implemented on site to minimise any potential impacts.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise fugitive emissions and to prevent pollution from fugitive emissions.

Permit condition 3.2.1 requires that emissions of substances not controlled by emission limits (i.e., fugitive emissions) shall not cause pollution. Condition 3.2.2 requires that a management plan shall be developed if pollution is subsequently identified.

10.5. Assessment of odour impact

Processes which are likely to produce potential odorous emissions are undertaken within buildings or sheltered units. As the only changes proposed under this variation are to include two additional stacks to the permit which shall omit dust emissions, the risk of impact from odours can be considered negligible, and thus no further assessment has been deemed required.

Based upon the information contained within the application, we are satisfied that the operators existing measures can be considered appropriate to prevent or where not practicable to minimise the effects of odour.

Condition 3.3.1 in the permit will also require that emissions from the activities are free from odour at levels likely to cause pollution outside the site. We are satisfied that this will be sufficiently protective in conjunction with the measures described by the applicant for minimising odour at the installation.

The permit also contains an improvement condition (IC7) requiring the operator to set up, implement and regularly review an Odour Management Plan (OMP), which is to form part of the operators Environmental Management System (EMS).

10.6. Noise and vibration assessment

All processes which are likely to produce noise emissions are undertaken within buildings or sheltered units. As the only changes proposed under this variation are to include the two additional point source emissions to air (emission point A5 from the main dust unit emission and emission point A6 from the blend bins emission). The risks of impact from noise or vibration can be considered negligible, and thus no further assessment has been deemed required.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where not practicable to minimise the effects of noise.

Conditions 3.4.1 of the permit requires noise from the activities to be below that which could cause pollution outside the site. We are satisfied that this will be sufficiently protective in conjunction with the measures described by the applicant for minimising noise at the installation.

The permit also contains an improvement condition (IC8) requiring the operator to set up, implement and regularly review a Noise Management Plan (NMP), which is to form part of the operators Environmental Management System (EMS).

10.7. Global warming potential

The changes proposed within this variation application to the Installation do not result in any changes to global warming potential from the site, therefore no additional assessment of global warming potential impact has been undertaken as part of this variation.

11. OPRA

The OPRA score has not been changed as a result of this variation and remains as 85. This will form the basis for ongoing subsistence fees.