

Natural Resources Wales permitting decisions

Biocatalysts Limited (Nantgarw Enzyme Production Facility) Decision Document

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New bespoke permit

The application number is: PAN-011842

The applicant /operator is: Biocatalysts Limited

The Installation is located at: Cefn Coed, Parc Nantgarw, Cardiff, CF15 7QQ

The application by Biocatalysts limited is for a new bespoke permit for their site Nantgarw Enzyme Production Facility located in Cefn Coed Parc Natgarw. The site has been operating since 2003 but has not been permitted. The applicant has applied for the site to be permitted as a low impact installation.

The enzymes are produced through fermentation growth of bacteria or yeast microorganisms. Once the microorganism has grown to a suitable level the specific enzyme is removed and filtered. The enzyme is either then used as a liquid or further processed by spray or freeze drying to produce a concentrated powdered enzyme.

We have decided to grant the permit for Nantgarw Enzyme Production Facility operated by Biocatalysts Limited.

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.

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.

Key issues of the decision

Receipt of application

The application for a new bespoke low impact installation was received on the 15th October 2020. The application was picked up for duly making 07/06/2021. The applicant had made a request for confidentiality which was later withdrawn. We made queries on the steam boilers that are in use on site in order to determine if these would fall under the medium combustion plant directive (MCPD). Subsequently it was found that these were below the 1 MWth input threshold and therefore were not subject to the MCPD.

We sent a request for more information on the 23 August 2021 asking for more information on site's extension and confirmation on the schedule 1 activity the site was operating under. A response was received on 16th September 2021 and the application was deemed duly made on that date.

Confidential information

A claim for commercial or industrial confidentiality had been made. However after we asked for more supporting document, the applicant chose to withdraw the claim on the 19th July 2021. We have therefore allowed the information to be available on the public register as per our guidance.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.

Consultation

The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.

A copy of the application and all other documents relevant to our determination (see below) are available for the public to view. Anyone wishing to see these documents could arrange for copies to be made.

We sent copies of the Application to the following bodies, which includes those with whom we have “Working Together Agreements”:

- **Public Health Wales**
- **Health and Safety Executive**
- **Rhondda Cynon Taf County Borough Council Planning department**
- **Rhondda Cynon Taf County Borough Council Environmental Health Department**

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

The consultation started on **24/09/21** and ended on **15/10/21**. An advert was also placed on our website.

Further details along with a summary of consultation comments and our response to the representations we received can be found in Annex 1. We have taken all relevant representations into consideration in reaching our determination.

Operator

We are satisfied that the applicant (now 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.

The facility

The extent/nature of the facilities taking place at the site required clarification. The decision on the facility was taken in accordance with RGN 2 Understanding the meaning of regulated facility. The applicant confirmed that their site falls under this category.

The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities.

- S4.1 Part A (1)(a)(iv) Organic compounds containing nitrogen (for example amines, amides, nitrous-, nitro or azo-compounds, nitrates, nitriles, nitrogen heterocyclics, cyanates, isocyanates, di-isocyanates and di-isocyanate prepolymers)

Directly associated activities:

- Discharge of effluent to sewer (under a trade effluent consent)
- 2 x Natural gas powered steam boiler (less than 1MWth input)

Legislation

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

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

The site

The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.

A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.

Site condition report

The operator has provided a description of the condition of the site within the following documents:

- Biocat4 Site condition report
- Biocat5 GeoEnvironmental Assessment Extension
- Biocat5 Geo-Technical and Geo-environmental Consultancy initial Building,

The applicant did not provide a full site condition report but did supply the Geo-Technical and a Geo-environmental Consultancy for the initial building and extension. The Geo-Technical included assessment of the ground soil sample in the area where the building was being extended.

The soil analysis showed there was asbestos (amosite and chrysotile) detected in the soil samples at 0.5 metres but none of the other containments showed exceedance above the generic assessment criteria.

We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

Biodiversity, Heritage, Landscape and Nature Conservation

The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .

The only emissions to air are from the steam boilers that <1MWth and are not captured by the medium combustion plant directive. The scale of these are considered insignificant without the need for abatement. All discharge of process water is to sewer through a trade effluent consent.

Nature 2000/Ramsar sites

A full HRA assessment was not required. As the site meets the criteria of a low impact installation we expect the site to have a negligible impact to air and water due to the small scale of the site. All process effluent is discharged to sewer under a effluent trade consent. This was detailed in a OGN 200 form 1.

Sites of special scientific interest (SSSI)

An Appendix 4 assessment was carried out on the SSSI for auditing purposes. As the installation did not have a pathway through scale to impact the site, we did not send the Appendix 4 assessment for consultation with the environment team but have filed it for auditing purposes.

Environmental Risk Assessment

Air

The only emission to air are emissions from fermenters, local exhaust ventilation (LEV), fume hood ventilation and the gas/steam boilers (less than 1 MWth input). All boilers have a thermal input of less than 1MWth and are therefore not subject to the medium combustion plant directive. All point sources to air have negligible emissions in line with the Low Impact Installation criteria therefore no further assessment has been completed

Emission limits

As the site does not have any medium combustion plant and is a low impact installation the site is not of a scale where we would need to impose emission limit values on the discharge to air.

Water

All process waste water is discharged to sewer and is regulated by the Dŵr Cymru under the trade effluent consent (TE647).

The operator had a discharge to ground through the soakaway. This process water and condensation from steam when boilers are vented. As the criteria for low impact installation does not allow any discharge to surface or ground except for surface runoff, the applicant has added tanks to store the discharge of water to ground. These are regularly checked and effluent is disposed appropriately.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent pollution of ground and surface water.

Emission limits

There are no discharge to surface water apart from rain water runoff, therefore are no emission limit value on the permit. All discharge of process effluent to sewer are regulated under trade effluent consent (TE647).

Soil

The operator has provided a description of the condition of the site. See section on site condition report for more details.

All activities take place inside the building on concrete surface. There will be no discharges to ground (see Water section for more details).

Odour

The site has not had any historical complaints with regards to odour. The applicant has assessed that odour would not occur outside the installation. We agree with their statement.

Noise

The applicant submitted noise monitoring of their equipment, inside the building, as part of their submission for a low impact installation application. They reported that the equipment had a noise range of 89-90 dB. We request for them to provide more information with a noise risk assessment. However the applicant responded with as Noise impact assessment.

The noise impact assessment was found to be not satisfactory. The background measurements had been taken at a different section of the building to those of the other measurements.

However while we did not find the report satisfactory, there was enough information within the report to determine that there was no significant risk of noise incidents to nearest receptor from the site.

The activities take place within the building and the activities only occur between 8:30-16:30 and does not operate at night. There have been no previous noise complaints associated with the site. Therefore we do not consider noise a risk at this site.

Fugitive emissions

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.

Fugitive emissions to ground water through the condensation were identified during the assessment as an emission to ground. The applicant had demonstrated that they will change this to allow the installation to meet the criteria of a low impact installation.

Monitoring

We have put in the emission points to air and sewer into the permit but have not imposed limit or monitoring requirements.

Reporting

We have specified reporting in the permit.

Condition 4.2.2 of the low impact installation template specifies the report that the applicant will have to submit to outline if the site meets the requirements for low impact installation

We made these decisions in accordance with the requirements of the low impact installation criteria outlined in Annex 1 of the form B2.

Operating techniques

The installation has been categorised as a low impact installation (LII). As such the installation must be operated within the parameters set out by the LII criteria as outlined in appendix 1 of the application form B2.

The applicant has outlined how their installation will perform within the low impact installations criteria. We have reviewed these and concluded that the applicant will be able to operate the installation within the criteria set out.

The permit conditions

The permit had been drafted with the relevant condition specific to the low impact installation template.

Incorporating the application

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.

As a low impact installation the applicant had to prove that they can operate the installation to the criteria set out for a low impact installation which forms the basis of their operating techniques. As a low impact installation they must operate the installation within these criteria, when the application was duly made, as per condition 2.3.1 and 4.2.2 in the permit.

Operator Competence **Environment management system**

There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.

The applicant's environment management system EMS is accredited to ISO14001 and the applicant has provided us with a certificate. We are therefore satisfied that their EMS covers the requirements.

Relevant convictions

Our Enforcement Database has been checked to ensure that all relevant convictions have been declared.

No relevant convictions were found.

OPRA

As the site is categorised as a low impact installation, it is not subject to OPRA based charges and scoring. The site will be charge on a fixed charge as outlined in our guidance on charging.

ANNEX 1: Consultation Responses

A) Advertising and Consultation on the Application

The Application has been advertised and consulted upon in accordance with Natural Resources Wales Public Participation Statement. The way in which this has been carried out along with the results of our consultation and how we have taken consultation responses into account in reaching our draft decision is summarised in this Annex. Copies of all consultation responses have been placed on Natural Resources Wales public register.

1) Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

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

a) Representations from Local MP, Assembly Member (AM), Councillors and Parish / Town / Community Councils

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

b) Representations from Community and Other Organisations

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

c) Representations from Individual Members of the Public

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

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