

Natural Resources Wales permitting decisions

Vale Europe Limited (Clydach Nickel Refinery) Decision Document

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Variation

The variation number is: EPR/BL4567IZ/V008

The operator is: Vale Europe Limited

The Installation is located at: Clydach Nickel Refinery, Clydach, Swansea, SA6 5QR

We have decided to issue the variation for Clydach Nickel Refinery operated by Vale Europe UK.

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.

This variation replaces two existing boilers with two new MCPs. The proposed MCPs use the same emission points; A30 and A31.

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

Confidential information

No claim for commercial or industrial confidentiality has been made.

Consultation.

There was no requirement to carry out a consultation as part of this normal variation. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.

Operator

We are satisfied that the operator is the person who will have control over the operation of the facility after the issue of the variation. There is no change to the operator of the installation as part of this variation. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.

The facility

The regulated facility is an installation which comprises a number of scheduled activities, this variation will include the addition of: EPR Schedule 25A Medium combustion plant generating steam for the process of producing gases including hydrogen and oxides of carbon.

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

There are no changes to the site boundary as a result of this variation. The new proposed boilers are replacing existing ones and will be using existing emission points and therefore the existing site plan does not require updating.

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.

An appendix 4 assessment has been completed for audit purposes. The SSSI requires no direct management and the main factors in causing damage to the SSSI would be Housing and other developments and fly tipping and litter. Only air emissions are expected from the new boilers which have screened out as insignificant and as such there is no predicted impact pathway to cause any damage to this geological SSSI as a result of this permit variation. Therefore it has been concluded that this variation is not likely to cause any changes to this geological SSSI.

Environmental Risk Assessment

Air

The Applicant has assessed the Installation's potential emissions to air against the relevant air quality standards, and the potential impact upon human health. These assessments predict the potential effects on local air quality from the Installation's stack emissions.

An H1 assessment has been carried which concluded that the assessed pollutants (Nitrogen Dioxide) were screened out as insignificant therefore there was no requirement for detailed air dispersion modelling. The applicant submitted the H1 assessment calculations which we reviewed and are in agreement with the assessment.

Emission limits

As no significant changes to the facility's air emissions are expected as a result of this variation, no further assessment of the emission levels is required. The Emissions and Monitoring Table S3.1 within Schedule 3 of the permit has been updated to reflect the replacement of the two Hydrogen Plant Ruston boilers with two new MCPs. We have removed the sulphur dioxide ELV associated with the existing boilers as the new MCPs are fuelled on natural gas and therefore emissions of sulphur dioxide are considered negligible in line with the MCPD.

Noise

A noise risk assessment was completed following the H1 risk assessment methodology by the applicant and assessed by NRW. The risk assessment concluded

that it will be unlikely that any additional noise from the MCP's will be noticeable at locations outside of the installation boundary.

Fugitive Emissions

A fugitive emissions risk assessment has been completed following the H1 risk assessment methodology by the operator and assessed by NRW. The risk assessment concluded that any changes in fugitive emissions is unlikely.

Monitoring

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

These monitoring requirements have been imposed in order to demonstrate compliance with the emissions limit values (ELV) in the permit, as per the ELV and monitoring frequency requirements specified within the MCPD. The monitoring frequency required by the installation BAT (annually) is more stringent than required by MCPD (every 3 years), therefore the more stringent requirement will apply in line with current NRW guidance.

Due to the addition of the two MCP's the facility must now also comply with the MCPD directive.

Pollutant	Type of Medium Combustion Plant	Fuel Type	Emission Limit Value (mg/Nm³)	Monitoring required
NO _x	Other (medium combustion plant)	Natural gas	100	Periodic – annually (MCERTS)

We have removed the annual monitoring requirement of sulphur dioxide from emission points A30 and A31 as the replacement boilers will be fuelled on natural gas and emissions of sulphur are considered negligible, therefore we no longer consider it a requirement to be controlled via an ELV nor monitoring.

After discussion with the operator, the emission limit of 15 mg/m³ for CO at emission points A30 and A31 has also been removed due to this not being achievable with the new boilers.

Based on the information in the application and the requirements set in the conditions of the permit we are satisfied that the monitoring techniques, personnel and equipment employed by the Operator will have either MCERTS certification or MCERTS accreditation as appropriate. A condition has been added to the permit stating the first monitoring measurements will be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation whichever is later.

Reporting

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions. We have updated the reporting requirements to include the new MCP's.

Operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. Table S1.2A has been added to the permit to reflect the addition of the two MCPs.

The permit conditions

Updating permit conditions during consolidation

We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit(s). We have also incorporated a number of new conditions specific to Medium Combustion Plants into the permit.

IC condition 9 which was due to complete in August 2022 has been extended to August 2025, at the request of the site officer.

Incorporating the application

As the installation now includes two MCP's the site must adhere to a number of additional operating techniques these have been specified in the consolidated permit.

OPRA

The OPRA score at permit issue is 225. There is no change to the OPRA score due to this variation. The MCP will attract a separate subsistence fee which will be charged separately to the OPRA subsistence fee. The relevant annual MCP fixed subsistence fee is £738.