

Compliance Assessment Report CAR_NRW0040249

Permit being assessed: BL4567IZ.

For: Clydach Nickel Refinery, held by Vale Europe Limited

At: CLYDACH REFINERY, Clydach, Swansea, Swansea, SA6 5QR.

Type of assessment carried out: Site Inspection, Reason: Routine.

On 19/07/2022 between 09:30 and 17:00.

Parts of permit assessed: Monitoring / Operations

NRW Lead Officer: Gary Evans, accompanied by Lee Mills.

Report sent to: Richard De Filippo, Sustainability Supervisor on 15/08/2022.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B3 - Infrastructure - Site drainage engineering (clean and foul)	Assessed (A)	
B4 - Infrastructure - Containment of stored materials	Assessed (A)	
C4 - General Management - Storage, handling labelling and Segregation	Assessed (A)	
D1 - Incident Management - Site security	Assessed (A)	
E1 - Emissions - Air	Assessed (A)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Assessed (A)	

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
0	0

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

No action required.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

At this time, we do not intend to take any further action.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment**Attendees**

Richard De Filippo – Sustainability Supervisor, Vale

Fiona Sharp – Sustainability Co-Ordinator, Vale

Gary Evans – Senior Specialist, NRW

Lee Mills – Senior Officer, NRW

Introduction

This Compliance Assessment Report (CAR) was completed following a site visit undertaken by Gary Evans and Lee Mills on 19th July 2022. An agenda was shared with the Operator prior to the visit and consisted of the following items –

- Induction
- Site visit / process overview
- Cooling Water Project update
- MCP changes on gas plant
- Permit variations
- Emission monitoring data (historical review)
- AOB

Lee Mills has recently been assigned the task of assisting Gary Evans on the Environmental Permitting Regulations aspects of the site. After a site safety induction and introductions Richard De Filippo provided Lee Mills a comprehensive overview of site operations, including an historical background, site map and presentation / video that provided a high-level overview of the nickel refining process.

Site visit

The Operator provided a site tour of the main permitted activities to provide Lee Mills with a visual overview and respond to any queries or questions. The tour covered the Kiln Plant where it was explained that the raw material (impure nickel oxide) is imported from Canada as fine granules and stored in silos prior to transfer to the kiln plant. The process was explained from start to finish and details of this can be found on the company's EPR permit. Other key process areas covered in site tour were the Process Gas Plant, Pellet and Powder Plant and Aqueous Effluent Plant.

Cooling Water Project update

Ricard De Filippo provide an update to the Vale's Cooling Water Project. The project seeks to reduce the site's reliance on water abstraction with new cooling water process.

Recommendation – Operator to submit a permit variation as soon as possible to include any changes to the site's activities that will be required as part of the Cooling Water Project.

MCP changes on Gas Plant

The Operator has recently submitted a permit variation for an activity that need to be permitted under the Medium Combustion Plant Directive (MCPD). Richard De Filippo queried how long NRW's Permitting Team would require to start the process of determination as Vale were working to a challenging timeline due to the expiry of paperwork relating to the existing boilers. Lee Mills explained that it was not possible to predetermine any variation application or provide any assurance of when NRW's Permitting Team would progress with Vale's application.

Recommendation – Richard De Filippo to send Lee Mills as email outlining the key dates for Vale that may cause difficulties if application not determined so it can be shared with the relevant team (completed).

Emission monitoring data (historical review)

In European Directive 2004/107/EC (Fourth Air Quality Daughter Directive), the EU set a target value for Nickel, for the protection of human health. The annual mean value of ambient Nickel may not exceed 20 nanograms per cubic metre (ng/m³). The target value entered into force on 31 December 2012.

NRW and previously Environment Agency have been working closely with the Welsh Government Nickel in Air group due to regular exceedances on the annual target in the Tawe Valley. The latest monitoring results from DEFRA have outlined that there could be further exceedances in 2022. The SW IR Team are working alongside EPP Air Quality in providing information to Welsh Government.

In light of these possible exceedances Vale has been asked to provide monitoring data, identify process changes and investigate any air quality events. Fiona Sharp presented numerous data sets that were requested prior to the site visit. Gary Evans thanked the Operator for providing the information and advised that it would shared internally at NRW and possibly with Welsh Government.

Recommendation – Operator to review existing Fugitive Emissions Monitoring Plan and to start preparing for an Air Operator Monitoring Assessment (OMA) that NRW will conduct at a date yet to be specified.

Recommendation – Operator to review fan changeover techniques on A54 to mitigate potential changes to particulate releases when changeovers occur.

AOB

The Operator's abstraction licences were discussed with Vale currently reviewing options on company's future water usage and requirements. The Operator also has Eel Regulations exemption notices on each abstraction that expire on 01/01/2023 and 31/12/2023 respectively.

Recommendation – Operator to review water usage requirements and discuss internally at Vale and decide if the company wish to retain abstraction licences. The Operator will also need to consider the implications of the Eel Regulations notices on abstractions and liaise with NRW on possible options.

End.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

What are suspended scores?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.