

Compliance Assessment Report

Report ID:
CAR_NRW0034910

This form will report compliance with your permit as determined by an NRW officer

Site	Clydach Refinery	Permit Ref	BL4567IZ		
Operator/Permit holder	Vale Europe Limited				
Regime	Installations				
Date of assessment	28/03/2019	Time in	10:00	Out	15:00
Assessment type	Audit				
Parts of the permit assessed	Resource Efficiency				
Lead officer's name	Evans, Gary Lewis				
Accompanied by	Dave Charlesworth,Palmer, Chris				
Recipient's name/position	Lee Davies/ Sustainability Manager	Date issued	03/04/2019		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	A	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
B3 - Infrastructure - Site drainage engineering (clean and foul)	A	
C2 - General Management - Management system and operating procedures	A	
E3 - Emissions - Surface water	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	A	
H1 - Resource Efficiency - Efficient use of raw materials	A	
H2 - Resource Efficiency - Energy efficiency	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
-----------------------------	---	---	---

If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Induction and Introduction

The visit was arranged at Vale Europe Limited based on proposed plans to minimise water abstraction from the Swansea canal and subsequently a reduction in effluent discharge into the River Tawe. The visit involved Dave Charlesworth from NRW Technical Fisheries and Chris Palmer Environment Officer Natural Resources Team Swansea to discuss the potential project and changes to certain aspects of the installation. All NRW staff undertook the visitor site safety induction.

Vale Europe staff present during the visit were Lee Davies Sustainability Manager, Fiona Sharp – Safety, Health and Environment, Herve Lebasatrd Consultant CR+.

Vale Process Overview and Cooling Project Update

Lee Davies provided NRW with a background overview to the Nickel manufacturing process at the Clydach refinery detailing the scale of the operations along with the resources utilised for example details of the two permitted abstraction points (Swansea Canal and River Tawe). The overview provided useful discussion on future plans for the site and a detailed overview of the products produced. This overview was essential for NRW staff that had not been to the plant previously and enabled a greater understanding of how the cooling project is integral to the plant operations and future sustainability.

Herve Lebastard from CR+ Consultants are currently working on a project to minimise water abstraction for operational cooling along with utilising the resources in a more sustainable way both on cost and environmental factors. Herve Lebasatrd provided a project overview detailing key changes on site to improve cooling operations on site, by the introduction of new adiabatic cooler, new tanks and pipeline including a new incoming mains water supply. The project was initiated based on the NRW Notice requiring the company to review abstraction points in line with the Eels Regulations 2015. The regulations will impact both abstraction points resulting in significant investment in screening for eel protection, with a potential knock on effect on production and maintenance of any subsequent control measures. NRW

extended the Notice period to allow Vale to review all options (including reducing water needs at source) potentially negating the need to for two abstractions or reducing the volumes needed. CR+ Consultants have initiated a significant review and identified key controls to minimise the need for abstraction from the Swansea Canal and River Tawe. The project has already been initiated by the introduction of main water into the process area and with planned purchase of new coolers. The changes on site will significantly reduce water consumption and improve operational stability due to the control and quality of the water supply compared with canal and river water.

The changes will also have a positive effect of the process effluent currently being discharged into the River Tawe. This is due to the project re utilising treated process water back into the cooling system resulting in approximately 70% reduction in effluent volume. This in turn will again reduce the parameters loading into the River Tawe. The company have however reviewed the new potential discharge volumes along with the temperature profile and detailed this in temperature modelling report that was sent to NRW for initial review. The modelling report shows a slightly elevated temperature profile on the proposed effluent discharge; however the volume is reduced by at least 70%. The report has been initially reviewed by NRW Technical Fisheries and haven't highlighted any major concerns, however the company will have to apply for permit variation to detail the proposed changes enabling them to be formalised within the permit. As part of the permit variation it is likely that the company will be issued with one or two improvement items requesting that the company provide a report detailing the performance of the effluent (quality – nickel and temperature) following the variation and implementation of the all the projected changes. The company will need to detail their justification and project thinking within the variation application detailing the reasons on the increase in temperature and include a copy of the temperature modelling report.

NRW (Chris Palmer) will continue with the review of Nickel concentrations in the River Tawe (Morriston area) over the coming year in line with the Water Framework Directive detailing river quality to ascertain whether the changes at Vale have appositve impact on downstream river quality.

Gary Evans highlighted that Vale should apply for permit variation as soon as practicable to ensure that all the proposed changes are regularised within the current Vale permit. If the company requires any pre-application discussion, please contact NRW.

Site inspection

Lee Davies provide NRW staff a site tour of the plant and a detailed visit at the effluent plant outlining key controls currently used and also tied in future proposals for certain parts of the plant. The visit also provided the opportunity to discuss a minor temporary change to the discharge treatment tank as submitted in an email to NRW on the 25th March 2019 utilising the weir box tank for final effluent neutralisation.

Maintenance Change ETP.

On the 25th March 2018 Vale submitted a minor change due to maintenance at the ETP. The company provided a full management of change review, temporary procedure and HAZOP for the short-term activity. The changes will not result in any changes to effluent quality and monitoring will continue in line with permitted requirements. Based on the information provided NRW have no objection to the planned maintenance activity, however the company must remain within permitted limits during the activity and any exceedance or incident will require notification in line with the installation permit. If the company has any questions or queries regarding this aspect, please contact Gary Evans.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0034910**

This form will report compliance with your permit as determined by an NRW officer

Site	Clydach Refinery	Permit Ref	BL4567IZ
Operator/Permit holder	Vale Europe Limited	Date	28/03/2019

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.