

Compliance Assessment Report CAR_NRW0042446

Permit being assessed: JP3632ZH.

For: Barry CHP , **held by:** Dow Silicones UK Limited

At: Wimborne Road - Dock 2, Barry, Vale of Glamorgan, CF63 3DH.

Type of assessment: Audit,

Reason: Routine.

On: 05/05/2023 between 09:00 and 16:00.

Parts of permit assessed: Operator Monitoring Assessment.

NRW Lead Officer: Geraint Harris, accompanied by Dale Padfield, Robert P. Hester.

Report sent to: Jude Sartor, Environmental Specialist , on 12/09/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Management - General management	C3 Minor	Permit Condition 1.1.1b
IR3E - Emissions and monitoring - Monitoring	C4 No impact	Permit condition 2.3.2
IR3E - Emissions and monitoring - Monitoring	C4 No impact	permit condition 3.5.1
IR3H - Emissions and monitoring - Monitoring for the purposes of the Industrial Emissions Directive (includes LCP)	C4 No impact	permit condition 3.6.4

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

Total non-compliances recorded	Total non-compliance score
4	4.3

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?

Criteria	Action needed	Complete by
IR1A	ensure the requirements of BS EN14181 are full understood and complied with. It is recommended that representatives	02/01/2024

Criteria	Action needed	Complete by
	from Dow undertake the relevant 14181 STA training.	
IR3E	Ensure all air monitoring is undertaken inline with the requirements of the IED Protocol for Utility Boilers and GTs .	02/01/2024
IR3E	Ensure the requirements of BS EN 14181 are being met for future compliance work.	02/01/2024
IR3H	Ensure the CEMS are calibrated in accordance with the appropriate CEN standards .	02/01/2024

Compliance criteria codes are listed in the 'Important information' section below.

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

Dow CHP OMA Audit

On the 5th of May 2023 NRW undertook an air related operator monitoring assessment (OMA) audit on Dow's CHP plant. Overall, the OMA report gained a score of 73%. Competency of Periodic Monitoring scored highest out of all the four OMA sections. The score is lower than previous audits which reflects the ageing CEMS equipment used at the site. However, Dow are in the process of replacing their current CEMs with three new analysers. A few minor observations and recommendations are noted within the audit, which Dow should take into account for future monitoring management and ongoing quality assurance.

The annual surveillance test (AST) report undertaken by ECL, provided as part of this audit, states a number of deviations from BS EN 14181 with regards to satisfying the requirements of the functional tests. While the functional tests have been completed to a degree, they are not complete and it is clear that the importance of them is not understood, or how the different parties involved need to be managed. It is possible that if there had been a failure of the functional tests then this would've been missed and may have led to issues in the later stages of an AST or QAL2.

Given that there appears to be good agreement between the CEM and SRM and that the AST has passed, it looks as if these deviations in real terms is limited. During the OMA, evidence was provided to show that the QAL3 control and CEM maintenance work was being undertaken, it just looks as though Dow have failed to provide it to the test house ahead of the AST. Even if there has been no impact on monitoring data quality, there are still several technical non-compliances with the permit. Consequently, three category 4 noncompliance's are being issued for failure to follow the full requirements of BS EN 14181 (permit condition 3.5.1), operate in accordance with IED Protocol for Utility Boilers and GTs (permit condition 2.3.2) and failure to calibrate continuous measurement systems in accordance with the appropriate CEN standards (permit condition 3.6.4).

Non-compliance: A category 4 minor non-compliance is given for breaching permit condition 2.3.2. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach**

a permit condition or emission limit. Non-compliance score CCS4.

Non-compliance: A category 4 minor non-compliance is given for breaching permit condition 3.5.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS4.**

Non-compliance: A category 4 minor non-compliance is given for breaching permit condition 3.6.4. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS4.**

A lack of awareness of the requirements of the functional tests has been attributed to the root cause of these noncompliance, which can be attributed to a lack of training with regards to BS EN 14181. It is being recommended that representatives from Dow undertake the relevant 14181 STA training. Consequently, a **Category 3 noncompliance** is being considered against permit condition 1.1.1.b. since if there had been a failure of the functional tests then this could've been missed and may have led to issues in the later stages of an AST or QAL2. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS3.**

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.

If your assessment result in Section 1 is suspended, what does this mean?

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 compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition 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 twenty 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 to 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.