Cyfoeth Naturiol Cymru
Natural Resources Wales

Compliance Assessment Report CAR_NRW0051707

Permit being assessed: BU2110IS.

For: Barry Site EPR/BU2110IS, **held by:** Cabot Carbon Ltd

At: Barry Site Sully Moors Road , Sully, Penarth, Vale of Glamorgan, CF64 5RP.

Type of assessment: Site Inspection,

Reason: Routine.

On: 03/03/2026 between 10:00 and 12:00.

Parts of permit assessed: 1R1A, IR3B.

NRW Lead Officer: Brigid Armstead.

Report sent to: Quality and Environment Manager, Quality and Environment Manager, on 07/05/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	Assessed (A)	
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	C3 Minor	2.2.5.1

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

Total non-compliances recorded	Total non-compliance score
1	4

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
IR3B	Provide photographic evidence of completed repairs to the bunding erosion identified during the site visit. Provide a root cause investigation outcome for the bunding degradation.	31/05/2026

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.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

This compliance assessment report (CAR) covers an audit of the secondary processing at Barry Silicon Based Manufacturing Installation.

The purpose of the audit is to evaluate the effectiveness of the site's environmental management system (EMS), operational procedures, and control measures in minimising environmental impact, particularly in relation to formaldehyde emissions and wastewater management. The assessment also considers staff competency, preventative maintenance, and emergency preparedness. The audit also followed previous discussions with the operator regarding the regulatory status of the activity and the potential that the process may meet the definition of a listed activity under Regulatory Guidance Note 2 (RGN2).

NRW requested that Cabot provide EMS documents relating to the secondary processing prior to the visit. Cabot provided an overview document for the treated process which details the chemistry, mechanism and gas management. Cabot also provided secondary processing specific aspects and impacts assessment and an emergency management plan.

Cabot provided a range of environmental management system documents specific to the treated silica production including the following

- Treated plant overview SOP
- Secondary processing overview document
- Emergency management plan
- Preventative maintenance work order register
- Training matrix
- Competency assessments

The above documents were reviewed prior to a site visit undertaken on 3rd March 2026.

The secondary processing undertaken on this site is the treated silica production included in the current permit as a DAA. The permit includes a definition of the treated silica production in Table 1.1.1 'the treatment of fumed silica with silicone (polydimethylsiloxane), product storage and bagging, and emissions from the process.'

NRW had advised the operator prior to this audit as to the potential that the process currently permitted as a DAA, would likely fit the definition of an listed activity as per definition guidance

given in Regulatory Guidance Note 2.

As part of the audit a site visit was undertaken which included a tour of the secondary processing area and the control room. The areas inspected were found to be operating as per the management documents. Treated silica production at the Barry Silicon-Based Manufacturing was found to be well managed, with clear and documented management of risks, responsibilities, proficiencies and training for those involved. The audit report has been sent separately to the operator and is stored on the NRW DMS.

During the site inspection, degradation was observed in the bunding beneath the wastewater treatment tanks. This bunding forms a key pollution-prevention measure relied upon to contain leaks and prevent fugitive emissions of substances to water or sewer. Permit condition 2.2.5.1 requires the operator to use Best Available Techniques (BAT) to prevent or, where that is not practicable, reduce fugitive emissions, explicitly including those arising from bunding, surfacing, and structures. The deterioration identified indicates that this containment infrastructure is no longer being maintained in a condition consistent with BAT, thereby undermining its preventative function.

Condition 2.2.5.1 is a preventative, management-based condition rather than an outcome-based one. Compliance does not depend on evidence that a release or pollution event has occurred, but on whether adequate systems are in place to prevent such events. The observed degradation demonstrates a failure to maintain a key pollution-prevention control, creating a credible risk pathway for fugitive emissions. As such, the condition has not been complied with, regardless of whether any actual release has yet taken place.

The non-compliance has been categorised as a Category 3 (minor) non-compliance. This is because, while there is a clear failure to maintain BAT-standard containment infrastructure, there is no evidence at this time of an actual release or environmental impact. The issue is localised, remediable, and risk-based in nature. However, it is more than an advisory matter, as degraded bunding demonstrates that preventative controls required by the permit are not being adequately maintained. A Category 3 classification therefore reflects the need for corrective action focused on strengthening asset inspection, maintenance, and management system controls, rather than responding to environmental harm after it has occurred.

Although the issue manifests as physical degradation of an asset, the root cause is considered to lie within the site's environmental management system. A functioning EMS should identify bunding beneath wastewater treatment tanks as environmentally critical infrastructure, subject to appropriate risk ranking, routine inspection, timely maintenance, and escalation when defects are identified. The presence of degraded bunding indicates weaknesses in one or more aspects of this system, such as inspection frequency, defect identification, maintenance prioritisation, or management review of asset condition. This represents a systemic failure to ensure that pollution-prevention measures remain effective over time.

In line with Principle 3 of OGN 113, further investigation is required to establish whether the underlying cause of this non-compliance extends beyond asset deterioration and constitutes a separate failure of the environmental management system. This will include reviewing whether appropriate inspection and maintenance arrangements are in place for environmentally critical

containment infrastructure. The investigation will consider whether a documented inspection regime exists for bunding and containment assets; whether inspections are sufficiently frequent and effective to identify deterioration at an early stage; whether identified defects are recorded, risk-assessed, and acted upon in a timely manner; and whether the site maintains an asset register and risk-based maintenance programme for pollution-prevention infrastructure. Should evidence demonstrate that deficiencies in these management or maintenance controls represent a breach of relevant permit conditions, an additional non-compliance will be recorded and scored on its own merits.

Action: Provide photographic evidence of completed repairs to the bunding erosion identified during the site visit. **Due 31 May 2026**

Action: Provide a root cause investigation outcome for the bunding degradation. **Due 31 May 2026**

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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(1) – Emissions to water
- IR3A(2) – Emissions to air
- IR3A(3) – Emissions to 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.

Disputing the Content of this Compliance Assessment Report Form
If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales

Concerns Not Related to the Content of this Compliance Assessment Report Form
If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone**: 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email**: enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone**: 0300 790 0203
- **Email**: 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.