

## Compliance Assessment Report CAR\_NRW0051714

**Permit being assessed:** BU2349IL.

**For:** Alyn Works, **held by:** Synthite Limited

**At:** Denbigh Road, Mold, Flintshire, CH7 1BT.

**Type of assessment:** Site Inspection,

**Reason:** Routine.

**On:** 07/05/2026 between 10:00 and 11:15.

**Parts of permit assessed:** See below.

**NRW Lead Officer:** Philip Harper, accompanied by Ricky Hartleb.

**Report sent to:** Technical Manager, Technical Manager, on 21/05/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor (Suspended)	3.1.2
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor (Suspended)	3.1.2
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor (Suspended)	3.1.2
IR1A - Installations - Management - General Management	C2 Significant (Suspended)	1.1.1a

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

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

Criteria	Action needed	Complete by
IR3A(2)	See actions in main text	01/05/2027
IR3A(2)	See actions in main text	01/05/2027
IR3A(2)	See actions in main text	01/05/2027

Criteria	Action needed	Complete by
IR1A	See actions in main text.	01/05/2027

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 discusses a site inspection which was undertaken on the 7th May 2026 and the Quarter 1 monitoring returns for Synthite.

At 10:00 am on the 7th May 2026, a site inspection was undertaken by NRW officers Phil Harper, Lead Specialist Industry & Waste Regulation, and Ricky Hartleb. This was an announced site inspection. The site was operational at the time of the inspection.

The purpose of the visit was to inspect the lagoon and the site's effluent treatment plant, which discharges treated effluent to sewer at the permitted S1 emission point.

In January 2026, Natural Resources Wales were notified that unusually high ammonia and formaldehyde levels had been noted in the wastewater system at Mold. An EPR Regulation 61 notice for information was served on the operator on the 5th March 2026, requiring that lagoon level and effluent discharge meter reading information was provided to NRW for review. Analysis of the information has highlighted discrepancies in the volumes of effluent discharged to sewer compared to lagoon levels. This may indicate an unauthorised discharge of effluent.

#### **Lagoons**

During the inspection, lagoon levels were observed to be well below the top of the liner; there was no visual evidence of loss of effluent.

#### **Effluent Treatment Plant**

The effluent treatment process was inspected during the visit; no issues were noted.

Further information will be made available as the investigation progresses.

#### **New Formox Plant**

The new Formox plant was not operational at the time of the inspection. A variation to permit the use of the new Formox plant is currently in NRW's determination queue.

**Quarterly Monitoring of Results – Q1 (January – March), due 31st March 2026**

Quarter 1 monitoring data for Synthite Limited, Mold Chemicals (Alyn Works), Denbigh Road, Mold, Flintshire, CH7 1BF, was submitted to Natural Resources Wales in accordance with permit condition 4.2.3.

**Emissions to Water W1**

Monitoring for water emissions has been undertaken in accordance with the environmental permit. The following observations have been made:

**Volumetric Flow Rate**

A maximum discharge volume of 579 m<sup>3</sup> at W1 was recorded on the 17th February 2026, against the permitted emission limit of 700 m<sup>3</sup> per day.

No permitted emissions level breaches have been identified.

**Emissions to Sewer S1**

Monitoring for emissions to sewer at S1 has been undertaken in accordance with the environmental permit.

No permitted emissions level breaches have been identified.

**Emissions to Air****Emission Points A10 and A11**

No data has been provided for emission points A10 and A11. These emission points are associated with the paraformaldehyde grinding process and are no longer in operation.

**Emission Point A12 – Fabric Filters Paraformaldehyde Production**

No permit emission limit value exceedances have been recorded for emission point A12 during this quarter. An update was received from the operator on the 1st May 2026 which stated that the carbon block would be fitted during the week commencing the 1st June 2026.

**Emission Point A15 – Wet Scrubber, Tanker Loading of Formalin**

NRW can confirm that the A15 emission point has now been physically removed, as discussed

within compliance assessment report CAR\_NRW0050108.

No emission limit exceedances have been identified.

### **Emission Point A16 – Wet Scrubber, Tanker Loading of Formalin**

In March 2026, a Regulation 36b notice was served on the operator in response to continued permit breaches at emission point A16. The notice required that the operator “Conduct an investigation to identify the root cause(s) of the A16 boiler emission limit value (ELV) exceedances for formaldehyde & TVOC for samples since January 2023 and determine corrective and preventive actions to ensure compliance with the permitted emission limit value. Submit a report of the investigation findings, corrective and preventative actions proposed, with associated timescales for completion.”

The operator provided a report that had been produced by Dynea that included improvement actions for the silver plant ECS at emission point A16.

A further EPR Regulation 36 notice was served on the operator on the 29th April 2026, requiring the operator to make the improvements as specified by Dynea by the 1st May 2026. Whilst this notice is active, scores for the A16 emission point will be suspended.

#### Formaldehyde

Monitoring for formaldehyde at A16 was undertaken on the 19th January 2026. A result of 96.2 mg/m<sup>3</sup> was provided. This is an exceedance of the permitted limit of 5 mg/m<sup>3</sup>.

**A suspended category 3 score has been applied against permit condition 3.1.2 (IR3A(2)) Emissions to air.**

#### Total Volatile Organic Carbon TVOC

Monitoring for TVOC at A16 was undertaken on the 19th January 2026. A result of 100 mg/m<sup>3</sup> was provided. This is an exceedance of the permitted limit of 40 mg/m<sup>3</sup>.

**A suspended category 3 score has been applied against permit condition 3.1.2 (IR3A(2)) Emissions to air.**

**Action 1:** Proceed with actions as specified by the EPR regulation 36 notice which was served on the 29<sup>th</sup> April 2026 by the **1<sup>st</sup> May 2027**.

### **Emission Point A17 – Three Natural Gas Boilers**

A Regulation 36 notice was served on the operator on the 5th May 2026 in response to regular emission limit exceedances at the A17 emission point. The notice required that the natural gas-fired boilers at A17 are replaced with boilers that are consistent with Best Available Techniques (BAT) by the 1st May 2027. Whilst this notice is active, scores for the A17 emission point will be suspended.

#### Oxides of nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>2</sub>)

Monitoring for oxides of nitrogen was undertaken on the 30/03/2026. A result of 175 mg/m<sup>3</sup> was

provided. This is an exceedance of the permitted limit of 150 mg/m<sup>3</sup>.

**A suspended category 3 score has been applied against permit condition 3.1.2 (IR3A(2))**

**Emissions to air.**

**Action 2:** Proceed with actions as specified by the EPR regulation 36 notice which was served on the 5<sup>th</sup> May 2026 by the **1<sup>st</sup> May 2027**.

**Action 3:** The replacement of the three natural gas boilers at A17 is regarded as a planned operational change. By the **12<sup>th</sup> June 2026** the operator must provide a written decommissioning plan for the removal of the three existing gas-fired boilers and associated infrastructure. This should include:

- Measures to prevent pollution to air, land and water during removal.
- Arrangements for handling and disposal of wastes.
- Identification and management of any hazardous materials.

This is to demonstrate compliance with the site's environmental management system and pollution prevention requirements under permit condition 1.1.1.

## **Management System**

### **Air Emissions**

Continued permitted air emissions level exceedances across a number of emission points indicate that monitoring data is not being adequately reviewed or acted upon. This suggests that the management system is not effectively identifying or resolving issues with abatement at the site.

Some emission points have exceeded their permitted limits for a prolonged period (in excess of 12 months). This indicates that appropriate corrective actions have not been implemented or have not been effective.

Information provided through Schedule 5 notifications has also indicated that elements of the installation are not being operated in accordance with Best Available Techniques (BAT). In the case of emission point A16, emissions have been recorded well above permitted emission limit values, representing a sustained non-compliance position.

Taken together, this demonstrates that the management system is not operating effectively to ensure compliance with permit conditions or to prevent emissions to air.

Continued non-compliance with permitted emission limit values, including the duration and magnitude of exceedances, has resulted in a category 2 score.

**A category 2 score has been applied under subheading IR1a for management. Note that this score**

**has been suspended whilst the EPR Regulation 36 notices are active.**

**Kind Regards**

**Phil Harper  
Industry and Waste Regulation Officer NW  
03000 65 3717 / 07890025506  
philip.harper@cyfoethnaturiolcymru.gov.uk**

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](mailto: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](mailto: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.