

## Compliance Assessment Report CAR\_NRW0050304

**Permit being assessed:** BU2349IL.  
**For:** Alyn Works, **held by:** Synthite Limited  
**At:** Denbigh Road, Mold, Flintshire, CH7 1BT.

**Type of assessment:** Report/Data Review,  
**Reason:** Routine.  
**On:** 30/09/2025.  
**Parts of permit assessed:** See Below.

**NRW Lead Officer:** Philip Harper.  
**Report sent to:** Technical Manager, Technical Manager, on 27/01/2026.

### 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	3.1.2
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.1.2
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.1.2
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.1.2
IR1A - Installations - Management - General Management	C2 Significant	1.1.1a

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

Total non-compliances recorded	Total non-compliance score
5	47

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	31/01/2026

Criteria	Action needed	Complete by
IR3A(2)	See actions in main text.	Already completed
IR3A(2)	See actions in main text.	28/02/2026
IR3A(2)	See actions in main text.	28/02/2026
IR1A	See actions in main text.	Already completed

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

#### **Quarterly Monitoring of Results - Q3 (July – September), due 30<sup>th</sup> September 2025.**

Quarter 3 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**

##### **Emissions to Water**

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 330 m<sup>3</sup> at W1 was recorded on the 15<sup>th</sup> July 2025, 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

#### Formaldehyde

Monitoring for formaldehyde at A12 was undertaken on the 10<sup>th</sup> July 2025. A result of 14.9 mg/m<sup>3</sup> was provided. This is a breach against the permitted limit of 5 mg/m<sup>3</sup>.

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

A schedule 5 notification was received for breach on the 8th August 2025, which provided the following information;

*“For the next A12 dust test, 1 test will be as normal and 1 without heating the probe and the hot box, to see if paraformaldehyde dust could be causing a false high i.e. total formaldehyde, not just gaseous formaldehyde. Finer particulate filters could cause a reduction in the LEV flow rate, so we are also exploring other options. .”*

Part B of the notification describes an intention to trial the use of a different type of filter.

A later schedule 5 notification for emission point A12 was received on the 28<sup>th</sup> October 2025. The schedule 5 notification which will be discussed in a later CAR form stated that a carbon block will be retrofitted to the scrubber to remove formaldehyde.

**Action 1:** Provide a timeline for the installation of the carbon block by the 31<sup>st</sup> January 2026.

### Emission Point A15- Wet Scrubber, Tanker Loading of Formalin

#### Formaldehyde

Monitoring for formaldehyde at A15 was undertaken on the 10<sup>th</sup> July 2025. A result of 6.5 mg/m<sup>3</sup> was provided. This in breach of the permitted limit of 5 mg/m<sup>3</sup>.

**A category 3 score has been applied against permit condition 3.1.2 (IR3A(2)) Emissions to water, air or land**

A schedule 5 notification was received for breach on the 8<sup>th</sup> August 2025

**NRW can confirm that the A15 emission point has now been physically removed as discussed within compliance assessment report CAR\_NRW0050108.**

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

#### Formaldehyde

Monitoring for formaldehyde at A16 was undertaken on the 10<sup>th</sup> July 2025. A result of 170 mg/m<sup>3</sup> was provided. This is a breach of the permitted limit of 5 mg/m<sup>3</sup>.

**A category 3 score has been applied against permit condition 3.1.2 (IR3A(2)) Emissions to water, air or land**

#### Total Volatile Organic Carbon TVOC

Monitoring for TVOC at A16 was undertaken on the 10<sup>th</sup> July 2025. A result of 117 mg/m<sup>3</sup> was provided. This is a breach of the permitted limit of 40 mg/m<sup>3</sup>.

**A category 3 score has been applied against permit condition 3.1.2 (IR3A(2)) Emissions to water, air or land**

A schedule 5 notification was received for breaches on the 8<sup>th</sup> August 2025, providing the following information;

*“The LVOC BREF was written based on modern silver catalysed formaldehyde production plants, unlike Synthite’s. Synthite’s silver plant gas flow is significantly lower than that quoted and the boiler is not rated for temperatures higher than those it currently operates at. We feel that BAT-AELs were assigned incorrectly to our boilers based on a completely different BAT technique in the BREF. We are looking at other ways to reduce the formaldehyde loadings from the silver process.”*

The above statement confirms that the boiler at A16 is not being operated in line with best available techniques, NRW views this as a failure to manage the site in accordance with a suitable management system. This point will be discussed in the following section.

**Action 2:** The operator must provide an action plan for how emission limit value compliance will be achieved at emission point A16 and timescales for its implementation by the 28<sup>th</sup> February 2026.

### **Management System**

#### Air Emissions

Continued permitted air emissions level exceedances indicate that data is not being reviewed adequately in turn indicating that the operator is not committed resolving abatement issues at the site. Some air emissions points have seen levels over their permitted limit for over 12 months.

Information provided as part of the data submission within Schedule 5 notifications has indicated that elements of site are not being operated in accordance with best available techniques and in the case of the A16 boiler emissions values have been detected that are well above the permitted emission levels.

Continued non-compliance with permitted emission limit values has attracted a category 2 score.

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

**Action 3: Continue to monitor and investigate any trends.**

Kind Regards

**Phil Harper**

**Lead Specialist - Industry & Waste Regulation**

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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.