

## Compliance Assessment Report CAR\_NRW0046146

**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:** 31/12/2024.

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

**NRW Lead Officer:** Philip Harper.

**Report sent to:** Technical Manager, Technical Manager, on 24/02/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	Assessed (A)	
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
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.1.2
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR3E - Installations - Emissions and monitoring - Monitoring	Assessed (A)	
IR3E - Installations - Emissions and monitoring - Monitoring	Assessed (A)	
IR4B - Installations - Information - Reporting	Assessed (A)	
IR4B - Installations - Information - Reporting	Assessed (A)	

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

Total non-compliances recorded	Total non-compliance score
6	24

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 action in main text	14/03/2025
IR3A(2)	See actions in main text.	Already completed
IR3A(2)	See actions in main text	Already completed
IR3A(2)	See actions in main text	Already completed
IR3A(2)	See action 2 in main text.	Already completed
IR1A	See actions 3 and 4 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- Q4 (October – December), due 31<sup>st</sup> December 2024.**

Quarter 4 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 791 m<sup>3</sup> at W1 was reported against the permitted emission limit of 700 m<sup>3</sup>

per day, which was recorded on the 16<sup>th</sup> December 2024.

A corresponding schedule 5 notification was received on the 19<sup>th</sup> December 2024. The schedule 5 notification provided the following information; *“Essential dewatering of the field opposite during Storm Darragh, to prevent flooding of the area to nearby residential property during heavy rainfall, like Storm Babet during October 2023 and Storm Christoph during January 2021.”*

Part B of the schedule 5 notification provides additional information as shown below;

*“The water directed to W1 was clean groundwater, that would have made its way to the river if the barrier wall was not in place. No chance of pollution to the river because the clean groundwater travels directly through pipework from the field to the W1 outfall.”*

Whilst the reported daily volume of 791 m<sup>3</sup> is over the permitted limit of 700 m<sup>3</sup> per day, severe weather was being experienced at the time of the report and the over pumping of water was necessary to prevent flooding.  
**No score has been applied on this occasion**

Monitoring for water emissions at W1 has been undertaken in accordance with the environmental permit.

**No permit limit breaches have been identified at permitted emission point W1.**

#### **Emissions to Sewer**

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

**No 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 operated.

##### **Emission Point A12- Fabric Filters Paraformaldehyde Production**

###### Formaldehyde

Monitoring for formaldehyde at A12 was undertaken on the 19th July 2024. A result of 5.5 mg/m<sup>3</sup> was provided. This is a breach against the permitted limit of 5 mg/m<sup>3</sup>.

**A category 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 5th August 2024, which provided the following information;

*"The bag filter pressure sensor was reading 1.4 inches of water at 10:25 on 27/01/2025. This reading was within the permitted values of 1 to 2 inches of water."*

Part B of the notification describes an intention to trial the use of the filter unit from A10 instead of A12s current filter unit.

**Action 1:** Provide NRW with a timeline for the replacement of the filter by the 14th March 2025.

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

##### Formaldehyde

Monitoring for formaldehyde at A15 was undertaken on the 19<sup>th</sup> July 2024. A result of 28.8 mg/m<sup>3</sup> was provided. This is 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**

NRW is aware that the operator is continuing to explore the use of a catalytic oxidation system and has made changes to tank filling operations to reduce the load on A 15.

No further emissions limits breaches were identified.

#### **Emission Point A16- Combustion of Silver Process Exit Gas (no abatement).**

##### Formaldehyde

Monitoring for formaldehyde at A16 was undertaken on the 19<sup>th</sup> November 2024. A result of 68 mg/m<sup>3</sup> was provided. This is 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.**

##### Total Volatile Organic Carbon (TVOC)

Monitoring for TVOC at A16 was undertaken on the 19<sup>th</sup> November 2024. A result of 72.4 mg/m<sup>3</sup> was provided. This value is in 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) Emissions to water, air or land.**

NRW is aware that the operator is continuing to explore the use of a catalytic oxidation system to provide abatement to the A15 and A16 emission points.

**Emission Point A17- Three Natural Gas Fired Boilers (no abatement).**

Monitoring for oxides of nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>2</sub>) at A17 was undertaken on the 3<sup>rd</sup> December 2024. A result of 181 mg/m<sup>3</sup> was provided for boiler 1. This value is in breach of the permitted limit of 150 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.**

No further emissions limits breaches were identified.

Servicing records were reviewed during a site inspection on the 13th February 2025. This will be discussed in a separate compliance assessment report.

**Management System**

**Continued emissions limit breaches indicate that the environmental management system is inadequate to prevent permit breaches.**

**A category 3 score has been applied against permit condition 1.1.1a under IR1A Management system and operating procedures.**

**Action 2:** Continue to undertake emissions monitoring and investigate any trends.

**Action 3:** Continue to update NRW regularly with regard to the progress of the catalytic oxidiser.

**Annual Reporting for 2024.**

Annual reporting data for 2024 has been provided as required by permit condition 4.2.2. No issues have been identified.

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 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](mailto: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](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.