

Compliance Assessment Report CAR_NRW0041135

Permit being assessed: BU2349IL.

For: Alyn Works, held by Synthite Limited

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

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 31/12/2022.

Parts of permit assessed: See report

NRW Lead Officer: Lara Cubley.

Report sent to: Jayme Mountford, Technical Manager on 13/02/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	C3 Minor	3.5.1
C2 - General Management - Management system and operating procedures	C3 Minor	1.1.1
E1 - Emissions - Air	C3 Minor	3.1.2
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Assessed (A)	

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

Total number of non-compliances recorded	Total non-compliance score
3	12

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
G1	See Action 1	31/03/2023
C2	Action 2	31/03/2023
E1	Action 3	28/02/2023

Action 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.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

This Compliance Assessment Report follows a review of monitoring data for Q4 and annual reporting for the 2022 period.

Quarter 4 monitoring data for Synthite Limited, Mold Chemicals (Alyn Works) was submitted to Natural Resources Wales (NRW) on 27/01/23 in accordance with timescales required by permit condition 4.2.3.

Q4 October – December 2022

Emissions to Water

Reporting of monitoring for water emissions at W1, S1, boreholes, culvert and River Alyn downstream has been undertaken in accordance with the environmental permit apart from the monitoring method for total ammonia (as nitrogen) deviating from the method stated in the permit. No permit breaches have been identified other than the reported analytical method. The method stated in the monitoring return is Ion Selective Electrode (ISE) as supposed to BS EN ISO 11732, required by the permit.

The operator submitted a comparison of their in-house water monitoring results by ISE compared to laboratory accredited results for the December period to NRW on the 19/12/22. The operator has reported that they are unable to find a laboratory to conduct the analysis of total ammonia (as nitrogen) to the suitably accredited standard of BS EN ISO 11732, as required by the permit. Instead, a very similar accredited method to standard BS2690: Part 7:1968 / BS6068:Part 2.11 : 1984 has been employed for analysis by the contract laboratory.

The operator has requested a change to the permitted monitoring standard for total ammonia (as nitrogen) in water from that permitted to their in-house ISE method. The operator's in-house method was provided to NRW on the 13/01/22.

NRW have some concerns regarding the use of the suggested in-house ISE method. The sensitivity and accuracy at low concentrations are not likely to meet the performance of the accredited lab based method, particularly at low concentrations. There may also be some interference from from K^+ and Na^+ . As such, we have asked the operator to provide a further 3 month's comparison data for our consideration up to and including April 2023.

Emissions to air

Air emission monitoring data has been undertaken to test methods stated in the permit. However, the operator has failed to monitor the following emission points for the following reasons:

A10 & A11 (Fine Power Manufacture) – *‘The grinders manufacturing facility has been non-operational during quarter 4 2022, so was unable to be tested.’*

A15 (Tanker off-loading formalin) – *‘The re-route was initially due to be completed before the end of last year. For that reason monitoring did not appear to be necessary because control measures were put in place to reduce the loadings/emissions from A15 (tankers were back vented where possible, so the ullage transfers back into the storage tanks, not through the wet scrubber / one tanker was loaded at a time, not multiple tankers, so as to reduce the loadings on the scrubber / the scrubber liquor was replenished daily, opposed to weekly). The person now responsible for this project is make further progress with this project on his return to work after Covid – I can update you with a time frame after I receive more information from them). However, A15 will be tested if still in operation during Q1.’*

ADVICE & GUIDANCE – The operator must apply for a permit variation to cover the change to this emission point.

A16 (Combustion of Silver process exit gas) – *‘The sampling ports seized and were initially due for replacement during shutdown 23rd/24th of November. However, resources were not available, and the ports were renewed during the Christmas shutdown. A16 sampling can recommence as normal now.’*

A18 (Mixed oxide plant emissions) – *‘A18 was due to be tested w/c 14th November. However the plant was out of commission at the moment and was rescheduled to be tested in December, but the plant was shut down earlier than planned for December.’*

Failure to undertake the monitoring in accordance with the environmental permit has resulted in a category 3 breach in contravention of permit condition 3.5.1 (G1 Monitoring of emissions & environment).

Action 1: Ensure future monitoring is carried out as specified by the environmental permit.

The root cause of the failure to schedule monitoring in accordance with permit requirements has been assessed as a category 3 breach of permit condition 1.1.1. (C2 Management Systems & Operating Procedures). Management systems should enable monitoring to be undertaken in accordance with the permit requirements so as to minimise environmental risks. The operator should schedule the monitoring earlier in the quarter to allow for unforeseen plant downtime and attempt to schedule monitoring when plant is running. Infrastructure issues should be addressed promptly to allow for permitted monitoring requirements.

Action 2: Review management procedures to ensure monitoring required by the permit is conducted.

Summary of Schedule 5 Notifications Received During Quarter 4

A7 Formaldehyde Breach 16th November 2022

A schedule 5 notification was submitted on the 6th December 2022, informing NRW that the permitted formaldehyde concentration had been exceeded at emission point A7 on the 16th November 2022 with a concentration of 9 mg/m³ compared to the permitted limit of 2 mg/m³.

This is the third ELV breach of Formaldehyde from this emission point since August 2022. The Operator has been investigating. On the 25th January 2023, Natural Resources Wales attended site to witness further testing of this emission point whilst varying the Catox abatement inlet temperature. This is detailed in CAR_NRW0041004. Initial indications were that the Catox temperature was set too low to adequately treat the Formaldehyde.

A category 3 score has been applied against permit condition 3.1.2 “The limits given in schedule 3 shall not be exceeded.” (E1 Emissions to air).

Action 3: A Part B detailing the investigations and actions following the breach should be submitted to Natural Resources Wales by the 28th February 2023 as requested in CAR_NRW0041004.

Annual Reporting

The annual report was received 27/01/22. This contained annual production /treatment and performance parameters as required by the Permit. No further actions identified.

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.

What are suspended scores?

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 and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance 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 20 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 – 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.