

Compliance Assessment Report CAR_NRW0046136

Permit being assessed: XP3538LD.

For: South Hook LNG Terminal, **held by:** South Hook LNG Terminal Company Ltd.

At: Dale Road, Herbrandston, Milford Haven, Pembrokeshire, SA73 3SU.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 31/12/2024.

Parts of permit assessed: Annual 2024 Monitoring Returns.

NRW Lead Officer: Daren Pike.

Report sent to: Eamon O'Loughlin, Environmental & Energy Coordinator, on 04/02/2025.

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	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
0	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?

No action required.

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.

At this time, we do not intend to take any further action.

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

Introduction

This Compliance Assessment Report (CAR) has been issued in response to the submission of the 2024 annual monitoring returns by South Hook LNG Terminal Company Ltd (the operator) for activities at South Hook LNG, Dale Rd, Milford Haven, SA73 3SU under permit EPR-XP3538LD.

Annual Reporting Requirements as required by condition 4.2.2

The Annual Report was submitted on 31 January 2025 in compliance with the permit requirements.

Point Source Emission to Air Parameters (Air 1 Form) as required by condition 4.2.2

The annual submission included results for all parameters required over this period and are in compliance with the limits set out in the permit.

Point Source Emission to Water Parameters (Water 1 Form) as required by condition 4.2.3

The annual submission included results for all parameters required over this period and are in compliance with the limits set out in the permit.

This CAR was undertaken on 4 February 2025. However, to ensure that the CCS score is attributed to the correct financial year (for billing) the date on CARS has been altered to 31 December 2024.

The Annual Report received from the South Hook LNG Terminal Company Ltd reported the following:

2 REVIEW OF 2024 MONITORING DATA

- 2.1.1 Condition 4.2.2(a) of the EPR Permit requires the operator annually, to provide 'a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data'.
- 2.1.2 A review is presented below of the permit monitoring and assessment for releases to air and water in 2024, as permitted in Schedule 3 of the South Hook LNG Terminal Company LTD. EPR environmental permit to operate, Permit Number EPR/XP3538LD. Interpretation of the results was carried out in accordance with the relevant permit conditions, including the emission limit values (ELVs).

2.2 Point Source Emissions to Air

Discontinuous (quarterly) NOx and CO Emissions - SCVs A1-A8 and A11-A17

- 2.2.1 During 2024, the National Physical Laboratory (NPL) carried out quarterly stack monitoring as follows: NPL hold the required MCERTs qualifications.

Table 2-1 - Quarterly Monitoring Undertaken by NPL During 2024

Monitoring Period	Dates of Monitoring	Number of SCVs Monitored
Quarter 1 (January – March 2024)	27 th – 29 th February 2024	6
Quarter 2 (April – June 2024)	19 th – 20 th June 2024	3
Quarter 3 (July – September 2024)	13 th – 15 th August 2024	5
Quarter 4 (October – December 2024)	17 th – 19 th December 2024	9

- 2.2.2 There were no breaches of permitted emissions limits recorded in the 2024 quarterly monitoring campaign undertaken by NPL.

Quarterly NO_x levels recorded during the monitoring campaign in 2024 have been presented in Table 2-2 below. The annual mean NO_x level was 57.5 mg/Nm³.

Table 2-2 - 2024 Quarterly monitoring data for NO_x levels

SCV Unit	ELV mg/Nm ³	NO _x Level, mg/Nm ³			
		Q1	Q2	Q3	Q4
A1 (SCV 1A)	107	48.8	106	44.5	60.5
A2 (SCV 1B)	107	35			64.7
A3 (SCV 1C)	107	48.2			67.1
A4 (SCV 1D)	107	30.2		53.1	56.5
A5 (SCV 1E)	107				52.1
A6 (SCV 1F)	107	44.7	59	59.5	72.7
A7 (SCV 1G)	107	47.1	48		
A8 (SCV 1H)	107			42.7	
					68.7
A11 (SCV 2A)	107				70.6
A12 (SCV 2B)	107				
A13 (SCV 2C)	107				
A14 (SCV 2D)	107			60.7	68.9
A15 (SCV 2E)	107				
A16 (SCV 2F)	107				
A17 (SCV 2G)	107				
Arithmetic Mean		42.3	71.0	52.1	64.6

Discontinuous (quarterly) NO_x and CO Emissions – SVC A18

- 2.2.3 The medium combustion plant (MCP) associated with point A18 is currently under construction and was not in operation in 2024. No monitoring of this point will take place until the MCP is in place.

2.3 Point Source Emissions to Water

W1 (Site drainage)

- 2.3.1 The emissions performance of the permitted site drainage discharge (emissions point reference W1) for 2024 is presented below. All monitoring is undertaken by an independent laboratory (Intertek). The laboratory is UKAS accredited to ISO 17025 accreditation. 'Average' refers to arithmetic mean unless otherwise stated.

- **pH**
 - The permitted emission limit for pH is 6-9. There were no breaches recorded within 2024.
 - The average daily pH was 7.75 with the minimum being 7.3 and the maximum being 8.2.
 - The main contributor to the site drainage flow is rainfall related, so pH levels are not related to the permitted process.
- **Turbidity**
 - No emission limits are specified for turbidity. The average daily turbidity result for 2024 was 1.91 nephelometric turbidity units (NTUs), whilst the maximum result was 32 NTUs.
 - Elevated turbidity to date is associated with high rainfall (run-off) events, as expected.
- **Oil and Grease**
 - No emission limits are specified for oil & grease, there is a requirement that there is no visible oil and grease on the W1 emission.
 - All daily visual assessments during 2024 recorded "none visible" for oil and grease demonstrating compliance with the permit.
- **TOC**
 - No emission limits are specified for TOC.
 - The maximum TOC concentration measured during 2023 was 6.3 mg/l, with an annual average concentration of 1.84 mg/l.
- **List 2 Metals (copper, zinc and iron only)**
 - No emission limits are specified for List 2 metals (copper, zinc, and iron only). List 2 metals were monitored monthly throughout 2024.
 - The average monthly copper concentration was 0.00263 mg/l with a maximum monthly concentration of 0.006 mg/l in 2024.
 - The average monthly zinc concentration was 0.0143 mg/l with a maximum monthly concentration of 0.040 mg/l in 2024.
 - The average monthly iron concentration was 0.0699 mg/l with a maximum monthly concentration of 0.373 mg/l in 2024.

W2 (Process effluents)

- 2.3.2 The emissions performance of the permitted process effluents discharge (emissions point reference W2) for 2024 is presented below:

- **Flow**
 - The permitted emission limit for flow is 3,500 m³ per day and a maximum of 164 m³ per hour.
 - The maximum daily volume discharged during 2024 was 916.39 m³. The maximum hourly flow during 2024 was 54.37 m³.
 - W2 flow is MCERTs audited against the "Minimum requirements for self-monitoring of flow: MCERTS performance standard" annually and is externally validated by a vendor "Critical Flow Solutions" (CSF) annually. Reports are available upon request.
- **pH**
 - The permitted emission limit for pH is 6-9. There were no breaches recorded within 2024.
 - The daily minimum and maximum pH recorded in 2024 were 6.12 and 8.73 pH units respectively, with an annual daily average of 7.59 pH units (using average of all maximum and minimum values from daily records).
- **Nitrates as N**
 - The permitted emission limit for nitrates is 50 mgN/l, 100kgN/day and an annual average limit of 50 kgN/day.
 - The annual daily maximum nitrates concentrations and loads recorded during 2024 were 13.0 mgN/l and 10.62 kgN/day, whilst the annual daily mean nitrates concentrations and loads were 6.31 mgN/l and 1.80 kgN/day respectively indicating compliance with the permitted emissions levels.
- **Oil and Grease**
 - No emission limits are specified for oil & grease, there is a requirement that there is no visible oil and grease on the W2 emission.
 - All daily visual assessments during 2024 recorded "none visible" for oil and grease demonstrating compliance with the permit.
- **Total Residual Oxidant (As Total Free Chlorine)**
 - The permitted emission limit for Total Residual Oxidant (as total free chlorine) is 0.1 mg/l.
 - All monthly results for 2024 were measured at <0.02 mg/l (Limit of Detection), demonstrating compliance with the permit.
- **Biological Oxygen Demand (BOD)**
 - No emission limits are specified for BOD.
 - The maximum BOD recorded in 2024 was 88.0 mg/l, with an annual mean of 28.67 mg/l.
- **Temperature**
 - The permitted emission limit for maximum daily temperature is 30°C.
 - The maximum temperature recorded in 2024 was 21.83°C with an average temperature of 15.16°C, demonstrating compliance with the permit.

2.4 Schedule 5 Notifications

- 2.4.1 There were no Schedule 5 notifications submitted in 2024.

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 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.