

Compliance Assessment Report CAR_NRW0046418

Permit being assessed: JP3239ST.

For: Lamby Way Landfill Site EPR/JP3239ST, **held by:** The County Council of the City and County of cardiff

At: Lamby Way Landfill Site Lamby Way , Cardiff, Cardiff, CF3 8EQ.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 31/12/2024.

Parts of permit assessed: 4.2.1.

NRW Lead Officer: Brigid Armstead.

Report sent to: Andrew Williamson, Contract Manager, on 11/06/2025.

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	C3 Minor	3.1.2
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor	3.1.2
IR3E - Installations - Emissions and monitoring - Monitoring	C4 No impact	3.6.1
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C4 No impact	3.2.3
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor	3.2.3
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.3.5
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.3.5
IR3E - Installations - Emissions and monitoring - Monitoring	C4 No impact	3.6.1
IR2I - Installations - Operations - Leachate levels (only applicable to landfill)	C3 Minor	2.9.1
IR4C - Installations - Information -	C4 No impact	4.3.2

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
Notification		

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

Total non-compliances recorded	Total non-compliance score
10	24.4

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(1)	Please provide a root cause analysis for the BOD breaches in 2024.	31/03/2025
IR3A(1)	Please provide a root cause analysis for the NH3-N breaches in 2024.	31/03/2025
IR3E	Please provide a root cause analysis and ensure that an action plan is implemented to ensure that SW1 can be sampled as per permit requirements.	31/03/2025
IR3A(1)	Please provide a root cause analysis for the Mecoprop exceedances in groundwater and ensure that an action plan is implemented to ensure that groundwater compliance limits are not exceeded.	31/03/2025
IR3A(1)	Please provide a root cause analysis for the NH3-N exceedances in groundwater and ensure that an action plan is implemented to ensure that groundwater compliance limits are not exceeded.	31/03/2025
IR3A(2)	Please provide a root cause analysis for the CH4 exceedances in perimeter landfill gas and ensure that an action plan is implemented to ensure that permit condition 3.3.5 is not breached	31/03/2025
IR3A(2)	Please provide a root cause analysis for the CO2 exceedances in perimeter landfill gas and ensure that an action plan is implemented to ensure that permit condition 3.3.5 is not breached.	31/03/2025
IR3E	Please provide a root cause analysis and ensure that an action plan is implemented to ensure that condition 3.6.1 is not breached.	31/03/2025
IR2I	Please provide a root cause analysis for the leachate level breaches in 2024 and ensure implementation of a plan to maintain leachate levels below 2m.	30/04/2025
IR4C	Please undertake a root cause investigation into why schedule 6 notifications are not being submitted as per permit condition 4.3.2 and provide this to NRW.	31/03/2025

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

The Lamby Way Landfill Annual Report 2024 was received by NRW and contained information as required under permit condition 4.2.1.

A review of the results of the monitoring carried out in 2024 was received for surface water, groundwater, perimeter landfill gas and leachate.

Surface water

Surface water inspections have not produced any recordings of visible oils and greases in the sampling manholes.

There are 6 surface water monitoring points, designated SW1 to SW6 which are monitored monthly for BOD and NH3-N.

There were 18 breaches of BOD in 2024. These breaches are considered a **category 3 non compliances with permit condition 3.1.2.**

There were 25 breaches of NH3-N in 2024. These breaches are considered a **category 3 non compliances with permit condition 3.1.2.**

Action: Please provide a root cause analysis for the BOD and NH3-N breaches in 2024. **Due 31st March 2025.**

SW1 samples could only be obtained in April, November and December. This is a failure to monitor point source emissions and is a **category 4 non compliance with permit condition 3.6.1.**

Action: Please provide a root cause analysis and ensure that an action plan is implemented to ensure that SW1 can be sampled as per permit requirements. **Due 31st March 2025.**

Groundwater

The compliance limit for Cadmium was not exceeded throughout 2024.

The compliance limit for Nickel was not exceeded throughout 2024

The compliance limit for Xylene was not exceeded throughout 2024

The trigger level for Mecoprop was exceeded at 7 sample points in May 2024. these breaches are considered **category 4 non-compliance with permit condition 3.2.3.**

The trigger levels for NH₃-N were breached on a total of 20 monitoring events across C2-C5, these breaches are considered a **category 3 non-compliance with permit condition 3.2.3.**

Action: Please provide a root cause analysis for the Mecoprop and NH₃-N exceedences in groundwater and ensure that an action plan is implemented to ensure that groundwater compliance limits are not exceeded. Due 31st March 2025.

Perimeter landfill gas

The highest volumes of CH₄ were detected within G6, with an average concentration of 2.7%. G10 Had an average concentration of 0.2%. All other monitoring locations had a concentration of 0%. Breaches of the CH₄ limit are considered a **category 3 non-compliance of permit condition 3.3.5.**

Action: Please provide a root cause analysis for the CH₄ exceedences in perimeter landfill gas and ensure that an action plan is implemented to ensure that permit condition 3.3.5 is not breached. **Due 31st March 2025.**

The highest volumes of CO₂ are detected within G8, located on the eastern perimeter of Lamby Way Landfill site. Points G5, G13, G16, G17, G19, G20 and G21 remain on average low CO₂ concentrations, with other points having on average elevated levels.. Breaches of CO₂ are considered a **category 3 non-compliance of permit condition 3.3.5.**

Action: Please provide a root cause analysis for the CO₂ exceedences in perimeter landfill gas and ensure that an action plan is implemented to ensure that permit condition 3.3.5 is not breached. **Due 31st March 2025.**

Perimeter gas monitoring points G22 – G23 have been lost due to damage / vegetation. This is a monitoring failure and is a **category 4 non compliance with permit condition 3.6.1.**

Action: Please provide a root cause analysis and ensure that an action plan is implemented to ensure that condition 3.6.1 is not breached. **Due 31st March 2025.**

Leachate

Leachate head levels in 2024 have been higher than the compliance limits throughout 2024. The operator needs to manage the leachate levels to reduce these to below limits specified in the permit. **A category 3 non-compliance has been given for a breach of permit condition 2.9.1**

Action: Please provide a root cause analysis for the leachate level breaches in 2024 and ensure implementation of a plan to maintain leachate levels below 2m. **Due 30 April 2025**

Action: As per previous correspondence, in relation to the continued elevated leachate levels, along with volumes being sent to sewer (average 92m³/day from the LTP in 2023 and

110m³/day in 2024) is it possible these are being influenced externally due to site setting and the tidal range? We would therefore welcome further investigation to better understand if this is an attributing factor and would be happy to consider any further information or attend a meeting with your consultants. **Due 30 April 2025**

Schedule 6 notifications

Schedule 6 Notifications were received on a quarterly basis and should instead be submitted 'within 24 hours of detection' as per permit condition 4.3.2.

Part B notifications should be submitted 'as soon as practicable' with further information.

The late submission of Schedule 6 notifications is a **category 4 non compliance with permit condition 4.3.2.**

Action: Please undertake a root cause investigation into why schedule 6 notifications are not being submitted as per permit condition 4.3.2 and provide this to NRW. Due 31st March 2025.

Annual Report submission

The annual report was received by NRW on 5th February which is not compliant with condition 4.2.1. As NRW received notification on 30th January 2025 that the Annual Report would be late, this non-compliance will not be scored but further late submissions may incur non compliance scores.

Action: Please ensure that Annual Reports are submitted by the 31st January each year. Due 31st March 2025.

Improvements made during 2024:

1. Works undertaken to improve pumping of leachate from the site, further maintenance undertaken to the leachate treatment plant, and installation of remote telematics, providing more consistent throughput.
2. Surface water system jetting and CCTV inspection.

END

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.