

Compliance Assessment Report CAR_NRW0045595

Permit being assessed: PP3139GB.

For: Hafod Quarry Landfill Site, **held by:** Enovert North Limited

At: Hafod Quarry Landfill Bangor Road, Johnstown, Wrexham, LL14 6ET.

Type of assessment: Site Inspection,

Reason: Routine.

On: 16/09/2024 between 10:40 and 14:00.

Parts of permit assessed: Site inspection .

NRW Lead Officer: Jamie Blythin, accompanied by Anthony Roberts.

Report sent to: Regional Manager, Regional Manager, on 10/12/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2A - Installations - Operations - Permitted activities	Assessed (A)	
IR3C - Installations - Emissions and monitoring - Odour	Assessed (A)	
IR1A - Installations - Management - General Management	Action only (X)	
IR3D - Installations - Emissions and monitoring - Noise and vibration	Assessed (A)	
IR3F - Installations - Emissions and monitoring - Pests	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?

Criteria	Action needed	Complete by
IR1A		10/01/2025

Criteria	Action needed	Complete by
	Action 1- Operator to ensure condensate is drained regularly from the toe of the temporary capping layer of cell 5a.	

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.

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

This Compliance Assessment Report (CAR), follows a routine site inspection at Hafod Landfill.

At the time of the inspection, the temperature was 15C and the air was relatively still. There was a slight breeze blowing from the SE.

NRW officers used a calibrated Gazomat Inspectra TDL unit to detect methane emissions during the inspection. A background reading of 2.4 ppm methane was detected at the site office car park.

The Site Manager, Regional Manager and Head of Landfill Gas, accompanied NRW officers during the inspection.

Inspection findings

Officers visited the gas utilization compound. Engine 3 (smaller engine) was operational along with the landfill gas flare. Engine 1 (larger engine) was not operational and the operator is currently awaiting the arrival of a new landfill gas engine to replace engine 1. The new landfill gas engine will be installed and commissioned in due course.

Officers detected a slight landfill gas odour in the gas compound and recorded a value of 10ppm in the air.

Engine 3- A value of 30ppm was recorded on the cooling vent of engine 3. As documented in previous CARs, the turbos were replaced on engine 3 on 10/06/24 but there still appears to be emissions from the cooling vent. Officers also observed a slight emission of oil smoke from the engine crank case breather pipe which indicates that the filter needs replacing.

Engine 3 is due to be sent offsite for maintenance and a full rebuild once the new engine is operational.

While walking up the eastern slope of cell 5a, readings did not go above the background level.

While walking across the top of cell 5a, some transient landfill gas odours were detected and readings between 2-10ppm were recorded.

Readings of 110ppm were recorded at Middle Groundwater and GW1.

Officers walked along the toe of cell 5a at the edge of the temporary capping layer. Readings did not go above the background level. There was evidence that a small amount of condensate had collected inside the toe edge of the temporary capping layer.

Action 1- Operator to ensure condensate is drained regularly from the toe of the temporary capping layer of cell 5a.

On the ground immediately in front of the toe of cell 5a, readings between 2ppm -5.6% gas were detected. The elevated values were not constant and spiked before dropping to lower levels. Landfill gas odours were detected when the emissions spiked.

Readings between 2-100ppm were recorded on the ground adjacent to the western flank of cell 5a.

There were no odours observed around the main leachate storage tank.

Scheduled works on site

Depending on weather conditions, it is anticipated that the following works will be completed over the next 4-8 weeks:

- Extension of the 250mm gas collection main along the perimeter of cell 5c to form a ring main around phase 5.
- Installation of temporary capping of northern flank of cell 5b. An area of approximately 2500m² will be capped with Linear Low Density Polyethylene (LLDPE).
- Raising height of concrete-ringed leachate chambers as height of waste increases in the active tipping cell.
- Installation and commissioning of new landfill gas engine to replace existing engine 1.

At the time of writing, it should be noted that a landfill gas audit of the site was completed in November 2024 by NRW's Landfill Emissions Reduction Project (LERP) Team. A separate landfill gas audit report and CAR will be produced in relation to this audit.

Offsite odours

Following the site inspection, offsite olfactory monitoring was completed at the following locations:

New Hall Road, Shellbrook Drive (Ruabon, Vauxhall Industrial Estate, Heol Kenyon, Y Gesail, Ruabon Road, Tan Y Clawdd, Worsley Avenue, Gwalia, Brynhyfryd, Maes Isaf, Bangor Road.

A localised landfill gas odour was detected on Bangor Road between the site entrance and the landfill gas compound. No landfill gas or waste odours were detected at any of the other locations at this time.

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.