

Compliance Assessment Report CAR_NRW0051914

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: Report/Data Review,

Reason: Routine.

On: 01/06/2026.

Parts of permit assessed: Review of Q1 (January-March) 2026 monitoring data .

NRW Lead Officer: Jamie Blythin, accompanied by Victoria Taylor.

Report sent to: Regional Manager, Regional Manager, on 03/07/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2I - Installations - Operations - Leachate levels (only applicable to landfill)	C2 Significant	2.7.1
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	C3 Minor	3.1.7
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor	3.1.1
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor	3.1.1
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1

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

Total non-compliances recorded	Total non-compliance score
6	51

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
IR2I	Action 1: Operator to continue to progress actions within the Leachate Management Action Plan (LMAP) April 2026 to: 1) Complete works to resolve any issues that may be contributing to over-estimation of leachate levels at the site e.g. perched leachate, to ensure all monitoring results are representative of actual leachate levels within the monitoring wells. 2) Investigate any monitoring wells with leachate levels above the permitted 2m compliance limit and complete works to ensure compliance with the permitted limit. Due 21/08/26 Action 2: Operator to provide NRW with an updated Leachate Management Action Plan (LMAP) by the specified date. This should include updates on the actions referenced above, all works completed since 10/04/26 and planned until September 2026 to reduce leachate levels to the 2m permitted limit. Due 07/08/26.	21/08/2026
IR3A(2)	Action 3: Operator to continue progressing the actions included in the Landfill Gas Management Action Plan and provide NRW with an updated LFGMAP by the specified date. Due 21/08/26.	21/08/2026
IR3A(1)	Action 4: Operator to continue reviewing future monitoring results. If elevated parameters are detected in subsequent results (Q2), carry out an investigation and report outcome to NRW. Due 31/07/26.	31/07/2026
IR3A(1)	Action 4: Operator to continue reviewing future monitoring results. If elevated parameters are detected in subsequent results (Q2), carry out an investigation and report outcome to NRW. Due 31/07/26.	31/07/2026
IR3E	Action 5: Operator to ensure all monitoring is completed as specified in the permit. Due 31/07/26.	31/07/2026
IR1A	Action 6: Operator to manage and operate the activities in accordance with the permit requirements and associated procedures. Adequate resources and any necessary contingency planning should be allocated to ensure the permit requirements are met. Due 31/07/26.	31/07/2026

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

This Compliance Assessment Report (CAR) follows a review of the Q1 (January - March) 2026 monitoring data which was submitted to NRW on 28 April 2026 in accordance with permit condition 4.2.3.

Leachate

The permit requires the operator to complete leachate monitoring as specified in tables S3.1 and S3.9.

Leachate Levels

January- Leachate level data was only provided for monitoring wells LMP4b and LMP5c in January. With reference to schedule 5 notification (HAF414), the operator states the following as to why the remainder of the permitted wells were not monitored during this month

'Due to staffing and inclement weather issues, the January monitoring visit had to be delayed and was completed on 02/02/2026.'

Monitoring of the remaining permitted wells (except LC3-chamber blocked) was completed on 02/02/26.

February - A second round of monitoring was completed for all wells (except LMP1b, LMP5c and LC3) between 18th and 25th February.

March - Leachate level data were provided for all monitoring wells during March (except LC3).

Monitoring of the leachate level in LC3 was not undertaken during Q1. The operator provided reasons for the monitoring not being undertaken in schedule 5 notifications HAF 414 and HAF 419 which confirmed that unsuccessful attempts to remove a pump which was "jammed" in the chamber, resulted in the well having to be re-drilled. The re-drilling of LC3 was completed in mid-March 2026.

During Q1, leachate heads between 0.69m and 25.76m were recorded. There were 20 instances where the recorded leachate level was greater than the permitted compliance limit of 2m and 11 instances where the recorded leachate level was greater than 14m.

NRW considers this a breach of permit condition 2.7.1 and a C2-Significant- non-compliance score has been applied (IR2I-Installations -Operations - Leachate Levels-C2).

The operator provided Schedule 5 Notifications HAF 414 and HAF 419 for the high leachate levels recorded in Q1.

The operator continues to assert that long standing issues such as perched leachate,

blocked slotted sections of some wells and issues with pumps are contributing to an over-estimation of leachate heads and manually dipped monitoring results are not representative of actual heights within the cells.

Action 1: Operator to continue to progress actions within the Leachate Management Action Plan (LMAP) April 2026 to:

- 1) Complete works to resolve any issues that may be contributing to over-estimation of leachate levels at the site e.g. perched leachate, to ensure all monitoring results are representative of actual leachate levels within the monitoring wells.
- 2) Investigate any monitoring wells with leachate levels above the permitted 2m compliance limit and complete works to ensure compliance with the permitted limit.

Due 21/08/26

Leachate Management Action Plan

Leachate Management Action Plans (LMAPs) were provided to NRW in September 2025 (reference Hafod/LMAP/003) , January 2026 (reference Hafod/LMAP004) and the actions were summarised in previous CARs (reference CAR_NRW0049496 and CAR_NRW0050738).

An updated LMAP was provided to NRW in April 2026 (reference Hafod/LMAP/005). The LMAP includes new /revised actions and any outstanding actions from the preceding LMAP; for completeness the status of all actions are summarised as follows:

1. Complete proposed permanent clay capping, circa 10,590m², as per Proposed Capping Plan 2026 (reference-HAF350)

Permanent clay capping on Cell 4 and Cells 5a/5b will be undertaken once tipping in Cell 5b is up to final levels. An area of 2500m² is now ready and capping has commenced. Restoration soils currently being deployed to last years capped areas.

2. Install further temporary LLDPE capping along outer northern flank and inner western flank of Cell 5b, as per HAF 350 Proposed Capping Plan 2026.

An additional 3,000m² of LLDPE capping has been placed on Cell 5b.

3. Install fully automated pumping system in Cell 5c once Cell is fully engineered, to ensure extraction can commence as soon as tipping operations are approved.

Completed - All electric cabling, leachate control panel and pumps operational. Ground Water and Surface Water pumps and controls are fully installed and operational. Surface water ditches improved and lagoon increased in size..

4. Install a replacement leachate extraction chamber for LC3 in Cell 3.

A CQA Plan was submitted and a replacement chamber was drilled between 16th and 22nd March 2026. Chamber successfully drilled to target depth of 49m and a pump was installed the week commencing 13th April.

5. Remove any siltation at the bottom of existing leachate infrastructure which may prevent compliance levels being achieved.

Discussions held with specialist contractor to use hydraulic solids handling pump to attempt to remove silt from the bottom of affected chambers. This work is ongoing.

6. Monitor liquid level in gas wells to determine if this is having any effect on gas collection efficiencies.

Gas team continue to undertake regular dipping exercises across the site. Eductor system has been installed on two gas wells in Cell 5a and recharge rates monitored. Report has been produced and submitted to NRW in March 2026.

7. Revised Leachate Management Plan was submitted to NRW on 12th December 2025. As this Plan is fully adopted, produce 6 monthly LMAP's to update progress towards the stated aims.

Ongoing- Operator to incorporate any NRW comments received and operate in accordance with the plan.

8. Conduct a HRA review, propose new leachate compliance levels together with justification to increase levels from 2m head to (6m) head in Cells 1 to 4.

Ongoing - HRA review in draft.

9. Install a new sealed access hatch onto the top of the Green Tank on Cell 1 to prevent any associated leachate pumping odours escaping along the perimeter of New Hall Lane.

Completed 30/01/2026

10. Installation of automated pumping infrastructure within MP4b, to affect what are believed to be perched leachate levels within this chamber and MP4a.

Pump installed in MP4b, new cabling put in to run from temporary generator. Continue to monitor levels in MP4a for the next 3 months to see if pumping in MP4b has any effect on drawing levels down.

Subsequent discussions with the Regional Manager, suggest that further work is required on MP4a and MP4b. Operator planning to re-drill LMP4a by the end of August 2026. They are currently building up waste levels on a section of the northern flank of Cell 4 to allow safe access for a drill rig.

Action 2: Operator to provide NRW with an updated Leachate Management Action Plan (LMAP) by the specified date. This should include updates on the actions referenced above, all works completed since 10/04/26 and planned until September 2026 to reduce leachate levels to the 2m permitted limit. **Due 07/08/26.**

Leachate Analysis

Quarterly monitoring for the leachate parameters specified in table S3.9 was completed for cell 5b (HAF LC5b) only.

Representative samples from cells 3 (HAF LMP3), cell 4 (HAF LC4) and cell 5 (HAF LC5) were not recovered. The operator reported that absence of sampling at LMP3 was due to the well being re-drilled during the monitoring visit. The operator reported that absence of sampling at LC4 and LC5 was due to the wells “not pumping, and no access for bailer”.

Landfill gas

Perimeter gas monitoring

Perimeter gas monitoring was undertaken in accordance with Condition 3.5.1(d) and Table 3.6 (Landfill gas in external boreholes).

With reference to Schedule 5 Notifications HAF 412 (January) and HAF415 (February), HAF417 (March), there were 37 instances during Q1 where methane (CH₄) levels in perimeter gas wells exceeded the 1% permitted Emission Limit Value (ELV).

On these notifications, the operator acknowledges the breaches of the 1% methane ELV for perimeter gas and states:

'Breaches where the methane to carbon dioxide ratio is much greater than or much less than 1.5 is very unlikely to be landfill gas. Much of the gas seen is believed to be mines gas.'

This is discussed at length in the most recent annual report. Methane from the underlying coal measures was identified at the site during early preoperational investigations.

The extra monitoring gas wells GBA to GBJ are not listed in the permit and thus do not have limits set and therefore are not included in the schedule 5.'

Values between 0.5 and 64% methane were recorded during Q1. **NRW considers this a breach of permit condition 3.1.7 and a non-compliance score has been applied (IR3A(2)-Emissions to air-C3).**

The operator provided NRW with an updated Landfill Gas Management Action Plan (LFGMAP) on 19/01/26.

With reference to the LFGMAP and schedule 5 notifications, the operator intends to apply for a permit variation to increase the ELV for methane at the perimeter wells.

Action 3: Operator to continue progressing the actions included in the Landfill Gas Management Action Plan and provide NRW with an updated LFGMAP by the specified date. **Due 21/08/26.**

Groundwater

Groundwater monitoring was undertaken in accordance with Condition 3.5.1(c) and Tables S3.5 (Groundwater-emission limits and monitoring requirements) and S3.11 (Groundwater - other monitoring requirements).

Samples were not taken at the following monitoring points as the operator states there was insufficient liquid to sample: BH HA 1A(T), BH HA 5(T), BH HA 9A(T), BH HA 11B(T) and BH HA 12A(T). BH 6A(B) was not sampled due to the sample tube being stuck in the well.

Q1 returns did not record any breaches of permitted ELVs.

The operator is required to carry out monthly monitoring of groundwater levels (dip to water -m- and water level mAOD). Monitoring was completed for all monitoring points.

Surface water

Surface water monitoring was completed in accordance with Condition 3.5.1(b) and (e), Tables S3.3 (point source emissions to water-emission limits and monitoring requirements) and S3.10 (surface water-other monitoring requirements).

The following ELV breaches were recorded during Q1:

SW1A

SW1A has a permitted ELV for Ammoniacal Nitrogen of 1.8mg/l. Breaches of the permitted ELV were recorded on the following dates:

15/01/26- Ammoniacal Nitrogen-39mg/l (34.3mg/l when lab uncertainty of 12% is taken into account).

04/02/26- Ammoniacal Nitrogen-4.8mg/l (4.22 mg/l when lab uncertainty of 12% is taken into account).

17/02/26-Ammoniacal Nitrogen-5.9mg/l (5.19 mg/l when lab uncertainty of 12% is taken into account).

27/03/26-Ammoniacal Nitrogen-18 mg/l (15.84mg/l when lab uncertainty of 12% is taken into account).

NRW considers the breach of the Ammoniacal Nitrogen ELV at SW1A to be a breach of permit condition 3.1.1 and a non-compliance score has been applied (IR3A-Emissions and Monitoring-Emissions to Water-C3).

SW1A has a permitted ELV for suspended solids of 50mg/l. Breaches of the permitted ELV were recorded on the following dates:

15/01/26- 130mg/l (117mg/l when lab uncertainty of 10% is taken into account).

NRW considers the breach of the suspended solids ELV at SW1A to be a breach of permit condition 3.1.1 and a non-compliance score has been applied (IR3A-

Emissions and Monitoring-Emissions to Water-C3).

Action 4: Operator to continue reviewing future monitoring results. If elevated parameters are detected in subsequent results (Q2), carry out an investigation and report outcome to NRW. **Due 31/07/26.**

SW2

SW2 has a permitted ELV for Ammoniacal Nitrogen of 1.8mg/l. All results for Ammoniacal Nitrogen at SW2 were within the permitted ELV during Q1.

On 15/01/26 a result of 2mg/l was recorded. However, when lab uncertainty of 12% is taken into consideration, this gives a result of 1.76mg/l which is within the permitted ELV.

SW2 has a permitted ELV for suspended solids of 50mg/l. All monitoring results for suspended solids at SW2 during Q1 were within the permitted ELV.

With reference to schedule 5 notification HAF413 and HAF416, the operator states:

'Ammoniacal-N (in SW1A) is following a similar pattern to previous years and is likely linked with anoxic waters created by decomposing leaf fall. Chloride remains at normal low levels..... Therefore, it is very unlikely to be due to any leachate contamination and is more likely to be representative of background conditions. No 'incident' is believed to have occurred.

Future monitoring results will be reviewed to see if the elevated concentrations continue. This lagoon is sampled monthly.'

The operator ascertains that*'No pollution is considered to have been caused and thatPermit limits will be reviewed for their appropriateness in future.'*

Monitoring

As referenced throughout this report, not all monitoring was completed during Q1, as specified by the permit.

Leachate levels- Although it is noted that three sets of monitoring were completed during Q1, the permit requires that monthly monitoring is completed for all monitoring points.

Leachate analysis- Representative samples from cells 3 (HAF LMP3), cell 4 (HAF LC4) and cell 5 (HAF LC5) were not recovered during Q1.

Groundwater- Monitoring point BH 6A(B) was not be sampled due to the sample tube being stuck in the well.

NRW considers the failure to complete monitoring as specified in the permit to be a breach of permit condition 3.5.1 (IR3E-Monitoring-C3) and a consolidated non-compliance score has been applied.

Action 5: Operator to ensure all monitoring is completed as specified in the permit. **Due**

31/07/26.

General Management

NRW considers the root cause for many of the permit breaches discussed above to be due to General Management. ***This is a breach of permit condition 1.1.1 (IRA-General Management) and a C3 non-compliance score has been applied.***

Action 6: Operator to manage and operate the activities in accordance with the permit requirements and associated procedures. Adequate resources and any necessary contingency planning should be allocated to ensure the permit requirements are met. **Due 31/07/26.**

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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(1) – Emissions to water
- IR3A(2) – Emissions to air
- IR3A(3) – Emissions to 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.

Disputing the Content of this Compliance Assessment Report Form

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

Concerns Not Related to the Content of this Compliance Assessment Report Form

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** 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.