

## Compliance Assessment Report CAR\_NRW0043320

**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:** Other.

**On:** 31/01/2024 between 11:21 and 15:00.

**Parts of permit assessed:** Inspection to check compliance with Regulation 36 Statutory Notice.

**NRW Lead Officer:** Jamie Blythin, accompanied by Stuart Ross.

**Report sent to:** Ian Craven, Regional Manager , on 27/03/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2K - Operations - Landfill gas management (only applicable to landfill)	C2 Significant (Suspended)	2.9.1
IR3C - Emissions and monitoring - Odour	C3 Minor (Suspended)	3.3.1
IR2K - Operations - Landfill gas management (only applicable to landfill)	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
2	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
IR2K	See Action 1 & Action 3 of Statutory Notice served 21/12/23	08/03/2024
IR3C	See Statutory Notice served 21/12/23	08/03/2024
IR2K		12/04/2024

Criteria	Action needed	Complete by
	Action only- Investigate the elevated methane readings around the cooling vents of the landfill gas engines and provide an update (detailing remedial measures as appropriate) to NRW by 12/04/24.	

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 follows a site inspection to assess compliance with the Regulation 36 Statutory Notice that was served on the Operator on 21/12/23.

Immediately before attending site, Natural Resources Wales (NRW) officers completed offsite olfactory monitoring at the following locations: New Hall Road, Shellbrook Drive, Vauxhall Industrial Estate, Heol Kenyon, Worsley Avenue and Bangor Road. A mild landfill gas odour was observed along New Hall Road but not at any of the other locations.

Since the notice was issued NRW Officers have continued to regularly assess odour in the vicinity of the site and landfill gas odour has been detected on several occasions.

#### **Inspection Findings - Cell 5a**

At the time of the inspection, the weather was dry with a moderate breeze, generally blowing from a south-westerly direction.

NRW officers used a calibrated Gazomat Inspectra TDL unit to detect methane emissions during the inspection. Before the inspection, a background methane reading of 2 ppm was detected at the site office car park.

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

Officers visited the gas compound and the operator reported that both landfill gas engines were operating as normal with no known issues relating to the landfill gas collection system. Incoming gas pressure was steady (no pulsing) with flow recorded at approximately 994M3/hr. NRW officers detected a slight landfill gas odour within the gas compound and while using the Gazomat, recorded the following methane values on the gas engine cooling vents:

Engine 3- 93ppm

Engine1- 10ppm.

Elevated methane readings around the cooling vent of engine 3 was discussed with the Head of Landfill Gas who confirmed they would investigate.

**Action only-** Investigate the elevated methane readings around the cooling vents of the landfill gas engines and provide an update (detailing remedial measures as appropriate) to NRW by 12/04/24.

### **Enforcement Notice Items**

**Action 1** - *'Complete temporary capping on the northern flank of Cell5a including installation of linear low density polyethylene (LLDPE) to minimise landfill gas emissions as far as reasonably practicable.'* Compliance deadline- 31/01/24

A significant amount of work has been completed on the northern flank of cell 5a including the placement of clay and the installation of an LLDPE membrane. On the upper flank, localised landfill gas odours were detected at discrete features in areas where welding to the LLDPE needed to be completed. Following the inspection, this work was completed W/C 05/02/24.

To help improve gas control the operator installed a new 180mm gas main on the internal bench of cell 5a on 02/02/24

NRW officers detected strong landfill gas odours and recorded methane readings of up to 40%v/v in the area at the base of the northern flank of Cell 5a 'bowl area'. Whilst soils have been placed to cover the waste they were not compacted into a cohesive layer. This section of flank is steep and ground conditions in the area are very soft and not favourable for access with heavy machinery.

The operator has committed to install a gas scavenger line in this section to improve landfill gas control on the lower flank.

Due to extended periods of heavy rainfall and storm conditions the operator requested an extension until 08/03/24 to complete this work. NRW agree to this extension and Gas control in the vicinity of the lower clay ramp area of cell 5a 'bowl area' will be re-assessed on 08/03/24.

It should be noted that failure to complete specified actions by the compliance deadlines will result in the non-compliance scores being reinstated.

**Action 2** - *'Complete temporary capping on the top of Cell5a including installation of linear low density polyethylene (LLDPE) to minimise landfill gas emissions as far as reasonably practicable.'* Compliance deadline- 31/01/24

Clay has been placed on top of Cell 5a covering an area of approximately 3000m<sup>2</sup> and LLDPE membrane has been installed covering an area of approximately 1800m<sup>2</sup>.

NRW considers that Action 2 of the Statutory Notice has been completed.

**Action 3** - *'Complete temporary capping on the western flank of Cell 5a to minimise landfill gas emissions as far as reasonably practicable.'* Compliance deadline-31/01/24

Additional clay has been placed on the western flank of cell 5a but it was clear that the temporary capping works in this area have not been fully completed. Exposed waste was visible on areas of the flank where clay is yet to be placed. Officers detected strong landfill gas odours in the vicinity of the western flank and recorded values of up to 1.2%v/v gas.

The operator states that they were unable to fully complete the temporary capping works on the western flank of cell 5a by the notice deadline due to extended periods of heavy rainfall and storm conditions. A large clay stockpile was observed near the western flank of cell 5a.

The operator has asked NRW for an extension of the compliance deadline for Action 3 until 08/03/24. NRW has considered the request and will agree to an extension of this compliance deadline on this occasion.

In addition to the completion of Action 3, the operator identified the need to install 10 new 6m depth pin wells in this area and connect these to the gas extraction system. This work was completed between 05/02/24-19/02/24.

**Action 4** - *'For the period 01/01/24 to 31/03/24 monitor the gas collection system fortnightly at all well control valves, manifolds (as applicable) serving cell 5a. Monitoring to include methane, carbon dioxide, oxygen, carbon monoxide, gas flow rate or suction, % balance gas plus gas well liquid levels (dip to liquid, dip to base (m)). Submit a report of the above data to NRW by the last day of each month.'* Compliance deadline 01/01/24-31/03/24

The operator submitted the required gas monitoring data to NRW on 30/01/24 and the dip data on 31/01/24.

NRW considers that Action 4 of the Statutory Notice has been completed.

**Action 5** - *'Provide NRW with an Action Plan stating how you will achieve compliance with the leachate level limits (2m) specified in Table S3.1 of the permit by 28/06/24.'*

The operator provided NRW with a Leachate Management Action Plan on 30/01/24.

NRW considers that Action 5 of the Statutory Notice has been completed.

**Action 6** - *'During the period 01/02/24-16/02/24 carry out a fugitive emissions FID walkover survey encompassing the temporary capped area of cell 5a. Submit a report of the findings to NRW by 22/02/24. The report shall include details of any remedial measures that have been taken or are to be taken to reduce fugitive emissions as far as reasonably practicable.'* Compliance deadline 22/02/24.

*The operator completed fugitive emissions FID walkover surveys encompassing the*

*temporary capped areas of cell 5a on 01/02/24 and 19/02/24. The operator submitted these surveys with an overview of remedial measures taken & proposed to NRW on 22/02/24. The operator also submitted an updated Action Plan detailing remedial measures taken/planned to NRW on 14/02/24.*

*NRW considers that Action 6 of the Statutory Notice has been completed.*

**Action 7** *'During the period 01/03/24-15/03/24 carry out a fugitive emissions FID walkover survey encompassing the temporary capped area of cell 5a. Submit a report of the findings to NRW by 22/03/24. The report shall include details of any remedial measures that have been taken or are to be taken to reduce fugitive emissions as far as reasonably practicable.'* Compliance deadline 22/02/24.

This action is ongoing and will be assessed following the compliance deadline stated above.

**Action 8-** *'Install new 180mm gas main on internal bench of cell 5a and reroute gas extraction currently going to manifold 16.'* Compliance deadline 31/01/24.

NRW considers that Action 8 of the Statutory Notice has been completed.

### **Environmental Permit Conditions - Compliance Assessment**

Following the inspection, NRW considers that the following environmental permit conditions remain in breach.

#### **Permit condition 3.3.1**

Permit condition 3.3.1 requires that *'Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.'*

NRW Officers detected odours at levels that are likely to cause pollution outside of the site. NRW also considers that the operator has failed to take appropriate measures to prevent and minimise odour, in particular from the Cell 5a northern flank 'bowl' area and the western flank of Cell 5a.

Following the initial breach, NRW's non-compliance scoring guidance requires that ongoing breaches of amenity conditions (>7 days) are scored as C2 (significant). A non-compliance score of C3 was issued in CAR reference CAR\_NRW0042993 and therefore a non-compliance score of C2 has been applied against permit condition 3.3.1 (IR3C-Odour).

#### **Permit condition 2.9.1**

Permit condition 2.9.1 requires that *'The operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to: (a) collect landfill gas; and (b) control the migration of landfill gas'.*

NRW considers that the operator has failed to take appropriate measures to collect landfill gas, in the 'bowl' area of the northern flank and on the western flank of Cell 5a. This a breach of permit condition 2.9.1 (IR2K-Landfill gas management).

**Score Suspension**

NRW's scoring guidance states that when an enforcement notice is served on an Operator we will suspend non-compliance scores. If the notice is not complied with then we will immediately reinstate any suspended scores

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](mailto: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](mailto: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.