

Compliance Assessment Report CAR_NRW0040788

Permit being assessed: YP3138UJ.

For: Llwyn Isaf Landfill, held by Gwynedd Council

At: Llwyn Isaf Landfill Site , Clynog Fawr, Gwynedd, LL54 5DF.

Type of assessment carried out: Site Inspection, Reason: Other.

On 23/11/2022 between 13:30 and 15:45.

Parts of permit assessed: 2.9 Landfill Gas Management, 3 Emissions and Monitoring

NRW Lead Officer: Anthony Roberts.

Report sent to: Steve Edwards, Waste Manager - Gwynedd on 12/12/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B1 - Infrastructure - Engineering for prevention and control of emissions	Assessed (A)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	

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

Total number of 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

LLWYN ISAF LANDFILL**SITE INSPECTION AND PERMIT VARIATION MEETING**

Present:

T Roberts NRW

Steve Edwards GCC

Sue Francis GCC

Landfill Gas Extraction System and Permit Variation Proposals**Permit Variation**

Proposed reduction in various parameters which require monitoring post closure were discussed as follows:

- Groundwater borehole monitoring frequency
- Surface water monitoring frequency
- Leachate sampling frequency
- Landfill gas monitoring and balancing (internal to waste)
- Landfill gas monitoring boreholes (external to waste)
- In a separate missive received from Sue Francis of Gwynedd, post meeting, the frequency of topographical survey measuring site settlement was requested to be reduced. ***This is agreed in principle and will be assessed and determined via e-mail response to the request.***
- Evidence base of compliance between 2009 and 2022 must be complete.

Each of these requests has been considered individually and agreements made in principle as to the way forward. These requests will be dealt with in individual formal e-mail responses.

Landfill Gas Extraction System**2.9 – Landfill Gas Management in EPR/YP3138UJ.****Table 3.7 Landfill Gas – other monitoring requirements.**

Steve Edwards and Sue Francis of Gwynedd CC. produced detailed gas extraction measurements which were reviewed on the day and subsequently forwarded via e-mail. The permit holder e mail response is reproduced as follows:

Currently we monitor every 2 months, with a 6-month requirement stipulated in the permit.

Our latest results (24/10/22) at the flare show :-

CH4 = 56.6%

CO2 = 25.9%

O2 = 0.10%

Suction = - 4.39mb

Flow = 25m3/hr (10hrs ON in 24hr cycle)

In addition, we have telemetry at the flare. Any 'flare off' alerts are sent as messages to e-mails & mobiles.

We'll continue to review the data; but for now, we'll leave the timer settings as they are; as we've actually seen a reduction in suction and stable CH4 in the latest October readings.

As suggested during the meeting, we'll also take a look at having the wells dipped and de-watered.

Taking into account the above data and following an e-mail submission of results and graphs, the following comments apply:

- The gas readings are acceptable and continue to show a high methane concentration with a relatively low flow.
- The CO2 results are low for such high methane concentrations and would normally be expected to be around 35%.
- The low CO2 may be due to CO2 stripping in perched leachate
- The suction pressure has increased of late, and this has led to conversely lower flow. In this case it is likely to be a water effect in the wells/extraction system with perched leachate affecting available free suction surface area.
- To assess the reduction in flow with increased extraction pressure, site should undertake a series of well dips where liquid above base and from top of well with percentage available slotting would be useful and should be undertaken within 8 weeks of the date of this CAR form
- Flare sizing is to be assessed and a 'right sizing' exercise is to be undertaken with results reported to NRW once the exercise is complete.

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.

What are suspended scores?

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 and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance 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 20 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 – 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.