

Compliance Assessment Report CAR_NRW0045433

Permit being assessed: GP3330BY.

For: Ffridd Rasmus Landfill, **held by:** Gwynedd Council

At: Ffridd Rasmus Landfill Site , Morfa Road , Harlech, Gwynedd, LL46 2UW.

Type of assessment: Site Inspection,

Reason: Other.

On: 15/10/2024 between 09:30 and 12:45.

Parts of permit assessed: 2.8 Landfill Gas Management.

NRW Lead Officer: Anthony Roberts.

Report sent to: Endaf Williams, Area Landfill Manager, on 17/10/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2K - Installations - Operations - Landfill gas management (only applicable to landfill)	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?

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

SITE MEETING - FFRIDD RASUS LANDFILL

LANDFILL GAS MIGRATION ASSESSMENT - 15TH OCTOBER 2024

A site meeting and inspection was conducted on the above date to discuss the monitoring for gas migration at the most vulnerable area of the site. This is deemed to be where the waste mass in the old Area 2 is closest to the operational buildings.

The permit requires the following:

2.8 Landfill Gas Management

2.8.1 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.

A gas analysis was undertaken by Cyngor Gwynedd for several weeks in proximal in waste gas wells along with a spiker bar survey of the ground (sand geology) between the waste and the nearest operations building. The table below shows the results:

Ffridd Rasus Perimeter Gas Monitoring Programme September/October 2024

20/09/2024

ID	CH4 %	CO2%	O2%	BALANCE %	CO PPM	H2S PPM	BARO mb	REL. PRESSURE mb
Spiker 1	0.1	0.7	19.9	79.4	0	0	1022	-0.22
Spiker 2	0.1	0.4	20	79.5	0	0	1022	-0.21
Spiker 3	0.1	0.4	20.1	79.4	0	0	1023	-0.17
Spiker 4	0.1	0.5	19.9	79.5	0	0	1021	-0.17
Spiker 5	0.1	0.4	20.1	79.5	0	0	1021	-0.18
BH8	56.6	22.1	0.3	21.1	0	1	1022	0.15
BH5	60.7	18.9	0.2	20.2	0	10	1023	0.1

27/09/2024

ID	CH4 %	CO2%	O2%	BALANCE %	CO PPM	H2S PPM	BARO mb	REL. PRESSURE mb
Spiker 1	0.2	0.9	19.9	79	0	0	1026	-0.36
Spiker 2	0.1	0.7	20	79.1	0	0	1022	-0.34
Spiker 3	0.1	0.5	20.3	79.1	0	0	1027	-0.31
Spiker 4	0.1	0.4	20.4	79.1	0	0	1026	-0.28
Spiker 5	0.1	0.4	20.3	79.2	0	0	1025	-0.31
BH8	60.6	22.7	0.2	16.5	0	0	1024	-1.96
BH5	60	19	0.2	20.8	0	15	1021	-2.6

04/10/2024

ID	CH4 %	CO2%	O2%	BALANCE %	CO PPM	H2S PPM	BARO mb	REL. PRESSURE mb
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Spiker 1	0.1	1.3	19.1	79.6	0	0	1037	-0.34
Spiker 2	0.1	0.6	19.8	79.5	0	0	1040	-0.48
Spiker 3	0.1	0.6	20.1	79.3	0	0	1037	-0.5
Spiker 4	0.1	0.6	20.2	79.1	0	0	1036	-0.57
Spiker 5	0.2	0.5	20.5	78.9	0	0	1038	-0.67
BH8	50.7	22.1	0.1	27.1	0	0	1038	0.05
BH5	59	18.4	0.1	22.5	0	0	1039	-0.19

11/10/2024

ID	CH4 %	CO2%	O2%	BALANCE %	CO PPM	H2S PPM	BARO mb	REL. PRESSURE mb
Spiker 1	0.1	0.6	20.3	79.1	0	0	1033	0.12
Spiker 2	0.1	0.7	20	79.1	0	0	1034	0.05
Spiker 3	0.1	0.6	20.2	79	0	0	1033	0.05
Spiker 4	0.2	0.5	20.4	78.9	0	0	1031	0.16
Spiker 5	0.2	0.5	20.6	78.7	0	0	1033	0.21
BH8	54.9	23.1	0.2	21.9	2	1	1036	-0.7
BH5	56.8	19.2	0.6	23.4	0	17	1031	-0.84

The trends show a significant source term of high methane concentration which does not reduce on extended pumping of limited volume from the well. In addition low concentrations of methane was detected in the ground between waste and the receptor, which is a possible migration pathway.

To comply with permit requirements, Cyngor Gwynedd should consider the installation of a single gas monitoring well through the sand layer to the requisite depth, to be agreed with NRW, within three months of the date of this CAR form.

Following this action, all requirements to use spiker bar survey techniques in this area will cease and an initial analysis of the new well will be conducted as a time series, to be agreed with NRW pre installation.

All other spiker bar surveys on site where there is no receptor should cease with immediate effect



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.