

Compliance Assessment Report CAR_NRW0043641

Permit being assessed: DP3732SQ.

For: Bryn Pica Landfill EPR/DP3732SQ, **held by:** Cynon Valley Waste Disposal Company Ltd

At: Bryn Pica Landfill Site , Llwydcoed, Aberdare, Rhondda-Cynon-Taff, CF44 0BX.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 31/12/2023.

Parts of permit assessed: Annual Repo.

NRW Lead Officer: Mostyn Wall.

Report sent to: Lee Foulkes, Site Manager, on 27/02/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR4B - Information - Reporting	Assessed (A)	
IR3E - Emissions and monitoring - Monitoring	C3 Minor	3.6.1
IR3E - Emissions and monitoring - Monitoring	C3 Minor	3.6.1
IR3A - Emissions and monitoring - Emissions to water, air or land	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	8

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
IR3E	Investigate the potential sources of Ammoniacal Nitrogen in the samples.	31/03/2024
IR3E	Investigate the potential sources of Ammoniacal Nitrogen in	31/03/2024

Criteria	Action needed	Complete by
	the samples.	
IR3A	Site to investigate the gas migration risk from well GMBH06-06 and the water level of the well.	31/03/2024

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

Bryn Pica Annual Report 2023

The site submitted the annual report to NRW on the 31.1.2024. The report included the improvement targets, performance parameters for 2023, annual production and treatment and the topographical survey.

Groundwater monitoring 2023

Site measures 4 points, 1 upstream and 3 downstream. Quarterly and monthly samples are taken from the 4 points. No samples were taken during June or July due to the boreholes being dry.

Sampling from well GW7 was reinstated in 2023 following access issues in 2022 and COVID restrictions.

Wells GW 5, GW 6 and GW7 have six samples showing a breach of the emission limit value of 1.5mg/l for Ammoniacal Nitrogen. All exceedances occur during similar time periods, in Q1 during May and again in Q3 September/ October.

Monitoring Location	Date	NH ₄ as N Value Reported
GW 5	May-23	6.3 mg/l
	Oct-23	8.46 mg/l
GW 6	May-23	4.47 mg/l
	Oct-23	3.14 mg/l
GW 7	May-23	1.93 mg/l
	Sep-23	6.7 mg/l

Similar results occurred during monitoring of an upgradient groundwater well GW0705 and

a surface water sample (SW1) during the same time period, indicating that the high levels of Ammoniacal Nitrogen may be linked. The operator notes that other parameters monitored remain at normal levels. If the Ammoniacal Nitrogen originated from the landfill then other parameters would also show high readings.

Non-compliance: A category 3 non-compliance is given due to the exceedance of the ELV for Ammoniacal Nitrogen during Q1 (May) in wells GW5, GW6 and GW7. This is a breach under condition 3.6.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score 4.**

Non-compliance: A category 3 non-compliance is given due to the exceedance of the ELV for Ammoniacal Nitrogen during Q3 (Sept & October) in wells GW5, GW6 and GW7. This is a breach under condition 3.6.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score 4.**

Action. Investigate the potential sources of Ammoniacal Nitrogen in the samples.

The remaining groundwater monitoring is compliant with the permit.

Surface Water Sampling 2023

Surface water sampling results submitted for wells SW1, SW3, SW4a, SW8, SW10, SW11, SW12 and BPUD were compliant with the permit limits.

Leachate Levels

During 2023 all leachate levels were compliant with the permit.

Landfill Gas Monitoring.

The site has 15 fixed ground monitoring boreholes. Two wells have significant methane levels. Well GMBH08-01 has an average CH₄ concentration of 26% and is connected to the gas collection network and flare.

Well GMBH06-06 has an average CH₄ concentration of 23% but has a low relative negative and positive pressure. The low pressure of the well indicates that the well probably has no flow and could be flooded.

Action: Site to investigate the gas migration risk from well GMBH06-06 and the water level of the well.

The site will undergo a full Landfill gas audit in 2024.

Remaining void

The remaining void at the landfill is calculated to be 2,785,190 cubic meters.

Annual Gas Production and Treatment.

Table S5.2: Annual (2023) Production / Treatment

Leachate:	Cubic meters/year
Disposed of off-site;	48,593
Disposed of to any onsite effluent treatment plant;	0
Recirculated into the waste mass;	0
Surface water and / or groundwater:	Cubic meters/year
Disposed of off-site;	n/r
Disposed of to any onsite effluent treatment plant;	0
Landfill Gas:	Normalised cubic meters/year
Combustion in flares (estimated)	285,077
Combustion in gas engines (estimated)	3,349,558
Other methods of gas utilisation;	0

End.

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.