

Compliance Assessment Report CAR_NRW0037624

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 carried out: Report/Data Review, Reason: Routine.

On 31/12/2020.

Parts of permit assessed: Annual returns

NRW Lead Officer: Richard Taylor.

Report sent to: Lee Foulkes, Technical Manager on 12/02/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Ongoing (O)	4.0
E2 - Emissions - Land and groundwater	C3 Minor	S4.5
E3 - Emissions - Surface water	C3 Minor	S4.3
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C4 No impact	4.3.1(b)
E2 - Emissions - Land and groundwater	C3 Minor	S4.6

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

Total number of non-compliances recorded	Total non-compliance score
4	12.1

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
G1	Restore full site monitoring and Lab analysis ASAP	31/03/2021
E2	Monitor and report future emission breaches	31/03/2021
E3	Monitor and report future exceedances	31/03/2021
G4	Report future exceedances via reporting schedule in permit.	31/03/2021
E2	Carry on monitoring regime and manage levels accordingly.	31/03/2021

Action 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 Landfill DP3732SQ****Annual Report 2020**

Review of submissions made under permit condition 4.2

1.0 Effects of Covid 19

The site was impacted throughout 2020 with the restrictions on movement of personnel through the Covid crisis. The monitoring laboratory used by the site restricted operations which affected the sites returns. Also, the site reported some courier samples going missing. This has resulted in approximately 70% of tests being completed for the year.

NRW took a decision to record the effects of Covid 19 on monitoring results as permit breaches for the public record, but to not apply a score.

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NRW apply a noncompliance to permit monitoring conditions for a number of missed samples in 2020 due to the effects of Covid 19. This is a non-compliance without a score being applied.

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2.0 Leachate Monitoring results

Results were provided in a slimmed down form. 62 samples were taken from 8 representative wells. -pH maximums recorded was at LD1 with 9 with the minimum recorded as 7.5 at 3 wells.

-Ammonia levels – These ranged between 2600mg/l at P3A and 41mg/l at LD1.

Electrical conductivity, Chemical Oxygen demand, Cadmium (not monitored) all showed steady patterns of consistency between high and low levels.

No permit emission exceedances were noted during the 2020 period.

3.0 Groundwater Monitoring results

52 samples were taken. Downgradient exceedances in permit limits were recorded as follows;

- Ammoniacal Nitrogen has a trigger level of 1.5mg/l which was exceeded 3 times during the period.
- Chloride has a trigger level of 37mg/l which was exceeded once with a reading of 55mg/l at GW7.
- Trigger levels for Zinc, Cadmium, Mercury, Mecoprop and Napthalene were not breached during the 2020 period.

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NRW apply a Cat 3 noncompliance to Groundwater trigger levels at permit condition S4.5 for Ammoniacal Nitrogen and Chloride to downstream monitoring points during 2020. This is a combined breach considered to have a minor environmental effect.

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4.0 Surface Water Monitoring results.

- PH limits of 6-9 apply. Site results showed no exceedances of permit limits with a maximum recorded at 8.4 and a minimum of 7.2 through the period.
- COD limits are 30mg/ with the site reporting a max 26mg/l and a minimum of 5mg/l in downstream records.
- AmmNi limits are 5mg/l with the site recording a max of 5.79mg/ and a minimum of 0.03mg/l in downstream results. The average was 0.77mg/l. The maximum was not declared as a breach of permit conditions in the annual report. This is a breach of the limit placed in site permit V005 at S4.3 and earns a Cat 3 noncompliance with minor environmental effect plus a Cat 4 for non-notification to NRW at the time of the exceedance. Also, the annual report declared that there were no exceedances in surface water in the general comments section which we do not support. Note, the results for AmmNi were provided in $\mu\text{S}/\text{cm}^3$ which is a measure for conductivity not AmmNi which should have been declared in mg/l in accordance with the permit.
- Chloride limits were well under the 250mg/l limit with a maximum of 19mg/l.
- Suspended Solids maximum reported figure downstream was 96mg/l against a permitted maximum of 50mg/l with the average over the period being 18mg/l. This was not reported as an exceedance to NRW and has been combined with the breach for AmmNi into a consolidated breach of downstream water quality standards.

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Cat 3 Surface water Ammoniacal Nitrogen exceedance of 5.79mg/l against a permit limit of 5mg/l marginal exceedance with minor environmental effect combined with Suspended solids limit exceedance of 96mg/l against a limit of 50mg/l. Permit condition S4.3.

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Cat 4 combined noncompliance for non-notification of above exceedances to NRW. Noncompliance with no environmental effect. Permit condition 4.3.1(b).

5.0 Sub Surface Monitoring Landfill gas results.

Permit limits are given at Table S4.6 as methane (up to 1% over background limits) and CO₂ (up to 1.5% over background limits).

- GMBH06-02 showed CH₄ levels of up to 9.2% with an average of 1.9% over the period.
- GMBH06-02 also exceeded the limit for CO₂ with a 4.6% maximum but a compliant average of 1.4%
- Other methane maximum limit exceedances were noted at (all prefixed with GMBH) 08-01, and 06-06.
- Other CO₂ exceedances were seen at 06-03, 06-08, 08-01, 06-05, 06-09, 06-10, 07-04, 09-01, 06-07, and 06-11.
- This is a total of 3 methane level exceedances and 11 CO₂ exceedances.

The levels should be brought to permitted limits. Site reported that increased extraction took place on 06-03 to offset any ground migration of the gas. The same exercise took place at 06-06.

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Cat 3 combined breach of Landfill gas in boreholes parameters with x3 methane and 11 CO₂ level exceedances throughout the reporting period. This is a noncompliance to permit limits with a minor environmental effect. Permit condition Table S4.6.

6.0 Improvement Targets under 4.2.1(b)

Site declared that they did not set any improvement targets for 2020.

7.0 Annual Production

Site took 57,600 tonnes of waste in 2020. No surface or groundwater was declared to be disposed of during the year. Landfill gas produced for the gas engines was 3,650,641 m³ with the flare used for 241,000 m³. This is approximately 6.6% of the time so fits within permit requirements to not have the flare stack monitored if it is used for over 10% of the time laid down in permit conditions.

8.0 Topological Survey

This was included in the annual report.

In 2020 the site filled 23,985m³.

Remaining void space is calculated at 2,848,910m³

At current filling rates this would take approximately 118 years.

9.0 Summary of permit exceedances for 2020

Summary of Permit exceedance	Detail of Exceedance	Score applied
Standard NRW position on non-monitoring/missed samples due to the effects of Covid 19.	NRW apply a noncompliance to permit monitoring conditions for a number of missed samples in 2020 due to the effects of Covid 19. This is a noncompliance without a score being applied.	Non scoring breach
Groundwater Permit condition S4.5	NRW apply a Cat 3 noncompliance to Groundwater trigger levels for Ammoniacal Nitrogen and Chloride to downstream monitoring points during 2020. This is a combined breach considered to have a minor environmental effect.	Cat 3 combined exceedance with minor environmental effect.
Surface Water Permit condition S4.3	Cat 3 Surface water Ammoniacal Nitrogen exceedance of 5.79mg/l against a permit limit of 5mg/l marginal exceedance with minor environmental effect combined with Suspended solids limit exceedance of 96mg/l against a limit of 50mg/l.	Cat 3 combined exceedance with minor environmental effect.
Non-notification of permit limit exceedance to NRW. Permit condition 4.3.1(b)	Cat 4 combined noncompliance for non-notification of above exceedances to NRW. Noncompliance with no environmental effect.	Cat 4 noncompliance without an environmental effect.
Landfill Gas permit	Cat 3 combined breach of Landfill gas	Combined Cat 3 permit

parameters Permit condition Table S4.6.	in boreholes parameters with x3 methane and 11 CO2 level exceedances throughout the reporting period. This is a noncompliance to permit limits with a minor environmental effect.	limit exceedances with a minor environmental effect.
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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.