

Compliance Assessment Report CAR_NRW0037617

Permit being assessed: BU7766IC.

For: Bryn Posteg Landfill , held by Sundorne Products (Llanidloes) Ltd
At: Bryn Posteg Landfill Site Tylwch Road , Llanidloes, Powys, SY18 6JJ.

Type of assessment carried out: Report/Data Review, Reason: Routine.
On 30/09/2020.

Parts of permit assessed: Routine Emissions Monitoring & Returns

NRW Lead Officer: Lara Cubley.

Report sent to: David Williams / Deborah Hall, Technical Manager / EH&S Compliance 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	C4 No impact	4.2.3/3.7.1/3.5.1
E2 - Emissions - Land and groundwater	C3 Minor	2.7.1, 3.5.1, 3.1.7
E4 - Emissions - Sewer	C3 Minor	3.1.2
E3 - Emissions - Surface water	C3 Minor	3.1.2
E1 - Emissions - Air	Action only (X)	
B1 - Infrastructure - Engineering for prevention and control of emissions	Action only (X)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C4 No impact	4.2.3, 4.3

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

Total number of non-compliances recorded	Total non-compliance score
5	12.2

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	See Action 4, 9, 13 in report body	29/04/2021
E2	See Action 2, 3, 7, 8, 10, 11, 12 in report body	29/04/2021
E4	See Action 5 in report body	29/03/2021
E3	See Action 6 in report body	29/04/2021
E1	Action 14	29/03/2021
B1	See Action 12 & 15 - submit plans for leachate/gas well re-	29/04/2021

Criteria	Action needed	Complete by
	drill 9C/GW325	
G4	see Action 1 &16 in report body	29/04/2021

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.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

Introduction

We have reviewed the report '*Sundorne products (Llanidloes) Limited - Bryn Posteg landfill site, Permit: BU77661C, 3rd quarterly monitoring report 2020.*'

This report was submitted to NRW on 17/11/20. Condition 4.2.3 requires that quarterly returns are submitted to NRW within 28 days of the end of the reporting period (29/10/20).

This permit condition has been breached as the monitoring returns were submitted late (G4 CCS4 - consolidated). The Operator informed us of a delay in reporting on 29/10/20 due to laboratory scheduling issues unrelated to COVID 19.

ACTION 1- Please ensure monitoring returns are submitted to NRW within 28 days of the end of the reporting period (29/04/21). If you are experiencing delays due to COVID 19 which may impact your ability to submit quarterly returns by the deadline, please notify NRW in advance and agree an extension date for submission.

Leachate levels -Table S3.1

Monthly leachate levels for the monitoring points have been provided.

Condition 2.7.1 requires leachate levels to be less than 1m above the sump base. Leachate levels provided show compliance at all monitoring points throughout the period apart from LCP3 and RMLP9C which marginally exceeded this level in September only with a level of 1.01 metres.

NRW considers the operator to have breached Condition 2.7.1 with no potential risk to the water environment as the breach is marginal (E2 CCS4- consolidated with

Conditions 3.5.1 and 3.7.1).

ACTION 2- The operator shall use suitable resources (financial and technical) to keep leachate levels at this low level and reduce leachate heads in phases 4B and 9C to below the 1m above sump base compliance limit listed in the permit.

NRW note that the exact leachate monitoring points being monitored and nomenclature still require addressing fully as required by CAR_NRW0036811 Actions 8 & 9. This could have an impact on the accuracy of reported monitoring data and could attract further permit non-compliances if not addressed by the Operator in a timely manner.

ACTION 3 – Complete Outstanding actions 8 & 9 from CAR_NRW0036811.

Leachate quality -Table S3.9

The Operator has provided monthly raw leachate quality data for the points specified in table S3.9 of the permit. The report only provides data for pH.

Monthly measurements of NH₄-N and chloride for the raw leachate are not included. In the Q1 monitoring report review (CAR_NRW0036858) the operator was asked to include monthly NH₄-N and chloride measurements for raw leachate in subsequent quarterly returns going forward.

6 monthly raw leachate quality data has not been provided as required by permit Condition 4.2.3. **NRW considers this to be a breach (G1 – CCS4 consolidated).**

ACTION 4- The operator must report this data and ensure that scheduled analysis and reporting for raw leachate is as required in quarterly/6 monthly monitoring returns going forward (no later than 29/04/21).

Treated leachate quality - Table S3.4

The operator has reported monthly leachate quality data following treatment at the effluent treatment plant as required by table S3.4. However, units have not been provided.

It is assumed that data provided refers to mg/l. If so, then the permitted limit for Suspended Solids of 500mg/l was exceeded in July with a concentration of 2,984mg/l and soluble methane limit of 0.14mg/l was exceeded in August with a concentration of 0.73mg/l.

NRW Considers this to be a breach of Permit Condition 3.1.2 (E4 – CCS3).

All other reported results provided are in compliance with the permitted limits.

ACTION 5 - The operator must provide an investigation into the 2 above breaches in form of Part B notification by 29/03/21).

Surface water-Table S3.3

Condition 3.1.2 states that the limits in Table S3.3 shall not be exceeded. Monthly monitoring data has been provided and shows that location SW2 (P2) exceeded the permitted limit of 50mg/l for Suspended Solids in August with a recorded concentration of 326mg/l.

NRW considers the Operator to have breached Condition 3.1.2 with the potential for minor impact on surface waters (E3-CC3).

ACTION 6 - The operator should use all suitable resources (financial and technical) to ensure compliance with the limits specified in table S3.3. Documents have been submitted to NRW in response to improvement conditions 10 &11 of the recent permit variation. Operator to progress improvements.

Groundwater -Tables S3.5 and S3.10

The operator has provided groundwater monitoring data. However, they have provided monthly readings for water levels rather than weekly readings as specified in Table S3.10. Not all monitoring data has been provided for all determinands. The Operator states that this was due to a laboratory error.

NRW considers this to be a breach of Condition 2.7.1/4.2.3 (G1 – CCS4 consolidated). ACTION: Ensure monitoring and reporting as required by permit in future monitoring returns by 29/04/21.

Condition 3.1.5 states that the trigger levels for emission to groundwater for the parameters and monitoring points set out in Table 3.5 shall not be exceeded. The recorded Chloride concentration of between 189 – 310mg/l for the period in G1/W1 exceeded the limit of 69mg/l. The Operator has made an informal submission to NRW proposing to increase the compliance limit for Chloride in G1/W1 due to road salt. NRW is satisfied that the compliance limit could be increased to 500mg/l with review on a regular basis.

ACTION 7 - The Operator must formalise this by applying for a permit variation and continue to review monitoring data.

The recorded Ammoniacal Nitrogen concentration of 2 – 2.9mg/l in W5/G18 exceeded the limit of 2mg/l.

NRW considers the operator to have breached Condition 3.5.1 with the potential for a minor impact on the water environment (E2 CCS3 consolidated with Conditions 2.7.1 and 3.1.7).

ACTION 8 - The operator must continue to monitor and review results of W5/G18 and investigate any trends and issues associated with exceedances.

Landfill gas in external monitoring boreholes - Table S3.6

The operator has submitted monitoring data for landfill gas in external boreholes situated

around the perimeter of the waste mass. Data now includes relative pressure.

No data for monitoring points G6, G33 or G35A have been provided. **NRW considers this to be a breach of Condition 2.7.1/4.2.3 (G1 – CCS4 consolidated).**

ACTION 9: Ensure monitoring and reporting as required by permit in future monitoring returns by 29/04/21. If monitoring points have been destroyed, please submit plans for replacement or otherwise to NRW for review and approval.

In total, there were 33 occurrences when the Methane result exceeded the compliance limit of 1%v/v and 55 occurrences when the Carbon Dioxide result exceeded the compliance limit of 1.5%v/v which is more frequently than in the last quarter.

Methane concentrations as high as 74.1% (G22) and Carbon Dioxide concentrations as high as 28% (G12) were recorded.

Monitoring points G19 – G24 and G38 are located around the Phase 1 which is relatively shallow and unlined. These appear to show consistently elevated concentrations of Methane and Carbon Dioxide in excess of permitted limits. Relative pressures have now been supplied and appear to be negative or relatively low, with the highest pressure recorded in August at G22 with a recording of 1.5mb. Monitoring points G16 – G18 are located further from the waste mass and on the far side of the surface water lagoons and appear to be in compliance with permitted limits. Based on the source pathway receptor approach NRW is satisfied that the likelihood of risks being realised from the noted landfill gas migration from the Phase 1 area is low. This is subject to constant review of monitoring data and the Operator must continue to follow their gas management plan and ensure efficient collection and utilisation of landfill gas.

NRW notes that monitoring point G22 had a high flow rate of 41.9l/h in, **which should be investigated.**

Other monitoring locations around the site were found to breach permit limits for Methane and Carbon Dioxide at various locations along the north site boundary, i.e. G25, G26, G29, G31, G35, G36 (near weighbridge building), and G37. Relative pressures have now been supplied and appear to be negative or relatively low. High flows were also noted at G25. Monitoring point G12 also contained elevated concentrations of Methane and Carbon Dioxide exceeding permitted limits along the southern boundary of the site adjacent to Phase 9B. Relative pressures at this location were negative. Gas extraction points closest in Phase 9B (GW88 & GW90) appear to have occasions during this period where balance gas exceeds 20%. This suggests air ingress and requires investigation (**see Action below**).

NRW considers Condition 3.1.7 to be breached with the potential for a minor environmental impact based on the source pathway receptor approach (E2 CCS3 - consolidated with conditions 2.7.1 and 3.5.1).

ACTION 10 - The operator should follow the gas management plan, i.e Action Plan B and report back regarding the gas control and collection system particularly in the vicinity of the breaches. Please provide a summary report of actions taken with findings and further recommended improvements should gas migration continue to be evident by 29/03/21.

ACTION 11 – Investigate high flows noted and report back to NRW by 29/03/21.

Landfill gas - other monitoring requirements Table S3.8

The operator has provided monthly in waste landfill gas collection system data. However, no comments or actions have been provided as previously where Oxygen levels exceed 5% and balance gas exceeds 20%.

The data shows there have been 31 instances where Oxygen levels have risen above 5% in the gas wells and 102 instances where the gas balance has been recorded above 20%, a slight increase on last quarter.

There have been 4 instances where Carbon Monoxide (CO) concentrations have been above 100ppm at three different monitoring points. Carbon Monoxide concentrations as high as 188ppm have been recorded (BPIW0308).

The permit requires that investigations shall be undertaken by the operator where the concentration of CO exceeds 100ppm. The Operator submitted a review to NRW on the 17/11/20 as required by the Gas Management Plan into investigation of elevated CO. This concluded that data did not reveal aerobic conditions which would be considered to be the first step for concern for potential heating. The review also identified 19 wells with air leaks and recommended seal repairs be instigated.

ACTION 12 - The operator shall provide an update to NRW in writing regarding progress with seal repairs to the 19 wells identified.

The Operator has provided weekly data for gas composition and vacuum pressure for the inlet to the gas compound. It appears that these are weekly spot readings, but this requires Operator confirmation. **NRW is of the opinion that this is a breach of Condition 4.2.3 as table S4.1 requires summary data such as max/min, average and total gas quantity (G1-CCS4).**

ACTION 13: The Operator is to ensure that weekly summary data is provided by 29/04/21 and going forward.

Ambient air -Table S3.11

The operator has provided data for particulate matter for the quarter as required by Condition 3.7.1 (e). This shows the limit of 200mg/m³/day required by Condition 3.1.8 table S3.11 of the permit was complied with. However, there appears to be a discrepancy in the calculations and number of days monitored.

ACTION 14: The Operator must check calculations and re-submit monitoring data by 29/03/21.

Notifications

The following table summarises the notifications received from the Operator for the period July-September 2020 as required by condition 4.3 of the permit.

Date NRW notified	Part A	Part B
16/07/20	Incident 15/07/20. RMPL9C/GW325 leachate	Part B received 14/10/20 – CCTV shows partial

	& gas well failure at approximately 12m unable to desilt.	collapse with leachate level reportedly below 1m compliance limit and thick foam. Dip tape is reportedly snagging meaning measurement not accurate. Pump is still running but stuck. Possible re-drill. ACTION 15: Submit proposals for re-drill & CQA plan by 29/04/2021.	
<p>NRW has not received any part A or B notifications for non-compliances relating to breaches of permit limit detailed above for this quarter. Breach of Condition 4.3 (G4 – CCS4).</p> <p>ACTION 16 - Ensure that all part A and B notifications are submitted to NRW as required by Condition 4.3 of the permit. As previously discussed, these can be updated on a quarterly basis for ongoing permit breaches (29/04/21).</p>			

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.