

Compliance Assessment Report

Report ID:
CAR_NRW0035139

This form will report compliance with your permit as determined by an NRW officer

Site	Bryn Posteg Landfill	Permit Ref	BU77661C		
Operator/Permit holder	Sundorne Products (Ilanidloes) Ltd				
Regime	Installations				
Date of assessment	20/05/2019	Time in	N/A	Out	N/A
Assessment type	Report/Data Review				
Parts of the permit assessed	4.2.3				
Lead officer's name	McClymont, James				
Accompanied by					
Recipient's name/position	David Williams /Technical Manager/ Tony Webber / Site Manager	Date issued	28/05/2019		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
C2 - General Management - Management system and operating procedures	C2	1.1.1
E2 - Emissions - Land and groundwater	C3	3.1.5
	C2	3.1.7
E3 - Emissions - Surface water	C3	3.1.2
E4 - Emissions - Sewer	C3	3.1.2
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	C2	3.7.4
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C4	4.2.3

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.
A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,
O = Ongoing non-compliance, not scored.

Number of breaches recorded	7	Total compliance score (see section 5 for scoring scheme)	105.1
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Quarterly Monitoring Review (January - March 2019)

We have reviewed the above report submitted with regard to Permit Condition 4.2.3.

Reporting

Condition 4.2.3 states that within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

The report was due with NRW at the end of April 2019, but was received on 02/05/2019.

This breach has been scored a CCS Category 4 breach of permit.

Action 1: You must ensure that reporting deadlines are adhered to. Provide NRW with a copy of your procedure(s) regarding reporting by 30/06/2019.

In-waste landfill gas

Carbon monoxide concentrations were above the management trigger level of 100 ppm at least once in 37 in-waste gas locations. Highest concentrations were seen in Phase 9D.

The report states that the potential for elevated carbon monoxide concentrations as a result of instrument error and interference with other components of the landfill gas is currently under review and an update site specific monitoring procedure will be included in the Landfill Gas Management Plan.

NRW received an updated Landfill Gas Management Plan on 10/05/2019, which is currently under review.

Lateral migration of landfill gas

Condition 3.1.7 states that the limits for landfill gas arising from the installation set out in Schedule 3, tables S3.6 and S3.7 shall not be exceeded.

Methane permit limits were exceeded on at least one occasion at 14 monitoring locations, this is a decrease compared to Q4 of 2018, when limits were exceeded at 15 locations. Carbon dioxide

permit limits were exceeded on at least one occasion at 25 monitoring locations, this is a decrease compared to Q4 of 2018, when limits were exceeded at 27 locations.

Many of the monitoring boreholes show ratios of landfill gas consistent with potential migration of landfill gas outside of the engineered containment areas and off site. The Permit limit for methane (1.0 %) was exceeded at boreholes on all boundaries of the site:

Northern boundary – G30 (max 23.9 %), G40 (max 33.5 %), G35 (max 33.4 %) and G36 (max 49.7 %).

Eastern boundary – G25 (max 36.4 %), G24 (max 52.2 %), G23 (max 12.4 %), G22 (max 80.5 %), G21 (max 72.5 %), G20 (max 89.2 %), G19 (max 76.3 %).

Southern boundary – G12 (max 74.2 %).

Western boundary – G1 (maximum of 37.3 %).

The maximum concentration of methane in perimeter boreholes of 89.2 % suggests methane enrichment and a large amount of gas being lost or uncaptured and laterally migrating.

These breaches have been scored a CCS Category 2 breach of permit due to the long standing and serious nature of these emissions limits breaches.

Action 2: Address landfill gas migration on all boundaries as a priority, providing an action plan to NRW by 31/05/2019 (action carried over from CAR_NRW0034961).

A CQA Plan detailing a proposal to address gas migration from Phases 1 and 2 using a gas drainage trench was received by NRW on 22/02/2019. A response to this Plan was provided in CAR_NRW0034818 on 14/03/2019. You were asked to provide an updated CQA Plan by 31/03/2019, and then again by 30/04/2019, but it has not been received.

Action 3: Provide an updated CQA Plan for the proposed gas drainage trench to NRW by 14/06/2019.

Leachate

Condition 3.7.4 requires that permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 3 table S3.1.

Table S3.1 requires that leachate levels are monitored in sumps LCP1, LCP2, LCP3, LCP6, LCP7, LCP8, RMLP9A, RMLP9B, RMLP9C and RMLP9D on a monthly basis.

Leachate levels have not been reported for any of the monitoring locations throughout the monitoring period due to "uncertainties about the extraction wells suitability for maintaining leachate levels within Permit Compliance Limits".

This breach has been scored a CCS Category 2 breach of permit.

Investigations of the site infrastructure have led to the proposed replacement of several leachate wells, which are currently being installed. Actions regarding the above are being dealt with separately to this CAR form.

Groundwater

Condition 3.1.5 states that the trigger levels for emissions into groundwater for the parameters and

monitoring points set out in Schedule 3 table S3.5 shall not be exceeded.

Levels of chloride in W1 exceeded the permit limit (69 mg/l) throughout the monitoring period with a maximum of 484 mg/l.

Ammoniacal nitrogen concentrations in W9 exceeded the compliance limit (2 mg/l) with a maximum concentration of 2.93 mg/l in March.

These breaches have been scored a CCS Category 3 breach of permit.

Exceedances of the current chloride permit limit for W1 will continue to be scored until such a time that a variation application to revise / remove the limit has been received, and NRW have reviewed and ultimately approved the variation. It is considered that further evidence will be required to support claims that this borehole is being affected by a localised source of salt.

Surface Water

Condition 3.1.2 states that the limits given in Schedule 3 shall not be exceeded. Table S3.3 provides limits for the surface water collection system.

Monitoring data submitted shows that permitted emission limits were not exceeded at P1 during the review period.

P2 breached the permitted limit for ammoniacal nitrogen (0.25 mg/l) in January and March at 1.51 mg/l and 0.55 mg/l respectively.

This breach has been scored a CCS Category 3 breach of permit

Actions regarding the above are being dealt with separately to this CAR form.

Emissions to Sewer

Condition 3.1.2 states that the limits given in Schedule 3 shall not be exceeded. Table S3.4 provides limits for point source emissions to sewer.

Ammonical nitrogen concentration exceeded the discharge consent level of 150 mg/l in January at 166 mg/l. pH was outside of the 6 to 10 consent level at 5.6 in February.

These breaches have been scored a CCS Category 3 breach of permit.

The limit given in the permit for Oils is 'Nil'. Results for Total Petroleum Hydrocarbons (TPH) provided in the report indicate that between 1250 µg/l and 6970 µg/l was detected in the treated discharge during this period. The report states that "the discharge consent refers to visible oils, whereas TPH (C6-C40) is a test of organics within the samples, rather than visible oil.

The Operator has confirmed that they will assess compliance with the parameter 'visible oils' by making an inspection of the effluent sample prior to submitting the sample for chemical analysis. If they are not able to see any evidence of oil on the surface of the sample then they will report that the sample is compliant for the requirement of 'Visible Oil: Nil'.

According to the report, a total of 7,506 m³ of treated leachate was discharged between 01/01/2019 and 31/03/2019. Additionally, 5,820 m³ was removed by tanker for off-site treatment.

Particulate Matter

Condition 3.1.8 states that the limits for particulate matter arising from the installation set out in

schedule 3, table S3.11 shall not be exceeded.

Particulate matter concentrations remained below the permitted limits at all locations during this review period.

General Management

Condition 1.1.1 requires that the operator shall manage and operate the activities:

1. in accordance with a written management system that identifies and minimises risks or pollution, including those arising from operations, maintenance, accidents, incidents, nonconformances and those drawn to the attention of the operator as a result of complaints; and;
2. using sufficient competent persons and resources.

The root cause of many of the breaches identified in this CAR is considered to be related to the operator not managing and operating the activities in accordance with the approved management system.

This breach has been scored a CCS Category 2 breach of permit.

Some improvements in site management appear to have been made during this review period, including that:

- NRW were notified of quarter 1 permit breaches via Schedule 5 Notifications on 15/04/2019;
- Leachate wells are being re-drilled;
- An update Landfill Gas Management Plan has been received; and
- A face-to-face meeting was held with NRW on 17/04/2019 to discuss outstanding CAR actions.

Action 4: The operator shall ensure that site activities are managed and operated in accordance with the approved written management system immediately. Continuing improvements in site management may lead to a reduction in the score for general management in the future.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0035139**

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Site	Bryn Posteg Landfill	Permit Ref	BU7766IC
Operator/Permit holder	Sundorne Products (Ilanidloes) Ltd	Date	20/05/2019

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
G1	C2	See comments section	31/05/2019
G4	C4	See comments section	30/06/2019
E4	C3	See comments section	31/05/2019
E3	C3	See comments section	31/05/2019
E2	C3	See comments section	31/05/2019
E2	C2	See comments section	31/05/2019
C2	C2	See comments section	30/06/2019

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.