

Compliance Assessment Report

Report ID:
CAR_NRW0031143

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	11/01/2017	Time in	10:50	Out	13:30
Assessment type	Site Inspection				
Parts of the permit assessed	Off-site odour, Landfilling Activities, Infrastructure				
Lead officer's name	Zachary, Aled				
Accompanied by					
Recipient's name/position	David Williams/ Technical Manager	Date issued	17/02/2017		

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
B1 - Infrastructure - Engineering for prevention and control of emissions	C2	2.9.1; 3.3.1
E2 - Emissions - Land and groundwater	C3	3.3.4
F1 - Amenity - Odour	C2	3.4.1
F3 - Amenity - Dust/fibres/particulates and litter	C3	3.3.2

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	4	Total compliance score (see section 5 for scoring scheme)	70
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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

11 January 2017.

Unannounced check inspection to assess levels of offsite odour, progress with non-compliance issues and the installation of a biomass boiler system to heat the Leachate Treatment Lagoon. Technical Manager David Williams (DW) met with on site.

Offsite Odour:

Permit Condition 3.4.1 states emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise those emissions.

Findings:

F1 - Amenity Odour.

Odour assessment around the site perimeter conducted with a Jerome Hydrogen Sulphide (H₂S) Monitor.

Landfill gas / Hydrogen Sulphide odour was detected in Layby off Llidiartywaun Cross-Roads. Persistent at an intensity level of 3/6 with a level of 1.548ppm (2.16mg/m³) H₂S recorded on the monitor.

Wind direction at the time of the assessment was noted as a strong southerly wind, weather clear and cold.

The odour threshold for H₂S is reported to be anywhere from 0.47ppb and upwards, so low levels may be detectable by local residents and cause nuisance. The Air quality guideline with an averaging time of 24hrs is 0.15 mg/m³ (0.11ppm) or 0.007mg/m³ (0.00502ppm) over a 30minute period, as defined by the World Health Organisation.

No works have been carried out to abate or reduce the release H₂S from the leachate stored in the intermediate storage lagoon. The use of a "media cover" to reduce or prevent de-gassing of the lagoon or treatment prior to storage has been discussed at length but no such improvement works have yet been completed.

High levels of H₂S were also recorded at various point sources around the landfill installation, especially Cells 9D(i), 9D(ii) and Cell 9C.

Hydrogen Sulphide diffusion tubes have been placed around the site and the local area (including Llanidloes) to assess off site emissions. Results are to be shared with NRW and Public Health Wales in due course.

These issues as whole are deemed a breach of condition 3.4.1

Due to the ongoing impact of odour from the site on local residents these issues have been scored a Category 2 breach of permit requirements.

Gas and Leachate Control Infrastructure.

Permit Condition 2.9.1 states that the limits for leachate listed in Schedule 4 table S4.1 shall not be exceeded.

Permit Condition 3.3.1 states that fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall be taken to have breached this condition where appropriate measures have been taken to prevent, or where that is not practicable, minimise, those emissions.

Permit Condition 3.3.4 states that all liquids, whose emissions to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used appropriate measures to prevent or where that is not practicable, to minimise leakage and spillage from the primary container

Findings:

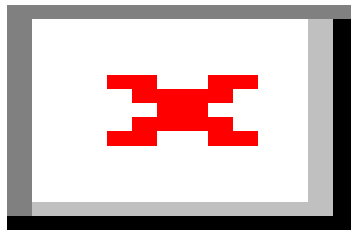
B1 - Engineering for prevention and control of emissions.

Leachate: We have yet to receive evidence or confirmation that leachate heads on site are back within permitted levels.

The high levels of leachate in Cells 9D(i) and 9D(ii) are leading to other operational issues including loss of leachate containment and inhibiting landfill gas extraction. This is considered a breach of condition 2.9.1

Please provide an up to date summary of leachate levels across all cells on site. During the inspection loss of leachate from the contained area of Cell 9D(ii) was visible, although this was being actively tankered away during the visit.

Improvements to the Leachate Treatment Plant are ongoing, the biomass boiler installation was inspected and is largely complete.



Leachate escaping the contained area of Cell 9D(ii)

Landfill Gas Emissions:

Emissions from Cell 9D(i) were assessed in an area where positive pressure has been recorded previously. A horizontal scavenging well had recently been installed in this area prior to the previous inspection, however emissions of up to 14,000ppm (1.4%) methane were detected in this area during the inspection, suggesting a greater need of gas control in this area.

A large emission over an extended area of the South flank of Cell 9D(i) was also recorded, up to 5.8% (58,000ppm) was detected from the south flank surface and 2.6% (26,000ppm) from the under drainage pipe surrounded by tractor tires. 5.30ppb H₂S was also recorded in this area.

Up to 16.9% Methane was also recorded from adjacent to the new scavenging well adjacent to the southern flank of Cell 9C.

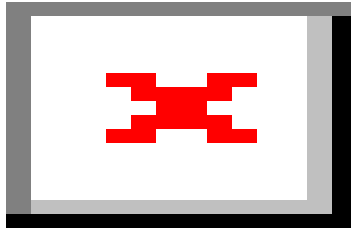
Up to 21% (210,000ppm) Methane was recorded from an area of Cell 9C / 8 where the lap and lay capping system finishes. This area had been identified in previous inspection's as problematic and site won clay has been placed here to prevent the emission, although this appears to have had limited to no effect on the emission.

These issues are considered a breach of conditions 2.9.1 and 3.3.1 and have been scored a Category 2 breach of the permit requirements as a result.

E2 - Emissions, Land.

Storage of Leachate Treatment Plant Sludge:

During the inspection the new DAF plant addition to the current leachate treatment plant was being commissioned. This plant has been added to the treatment process in an attempt to address the issues of "hard" COD being experienced in the treatment process. Although the addition of the DAF plant is considered a benefit the sludge being generated from the process was being discharged to an unlined ditch adjacent to the plant.



This issue is considered a breach of condition 3.3.4 and has been scored a Category 3 breach of the permit requirements as a result.

Landfilling activity.

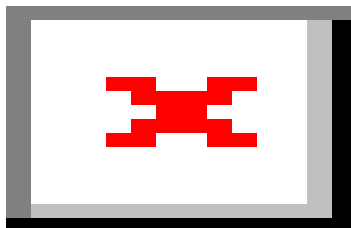
Permit Condition 3.3.1 states that fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall be taken to have breached this condition where appropriate measures have been taken to prevent, or where that is not practicable, minimise, those emissions.

Permit Condition 3.3.2 states that litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, have been used to prevent, or where that is not practicable to minimise the litter and mud

Findings:

C4 - Storage, handling, labelling and segregation.

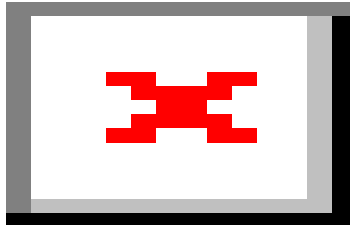
The western edge of Cell 9D(ii) is still poorly delineated and waste is spilling over the extent of the engineered containment systems and onto the haul road. This gives rise to potential pathways for loss of gas and leachate from the cell. This issue was raised on the previous inspection and has still yet to be addressed.



This has been scored a breach of the permit requirements as a result, consolidated with the breach associated with landfill gas emissions above.

F3 - Amenity, Litter

A large amount of litter could be seen blowing out of the operational cell at the time of inspection. A lot of this litter was being captured by the southern site perimeter / security fence, although some could also be seen in the adjacent agricultural fields. Measures should be taken to reduce or minimise litter emissions, or where that is not possible tipping operations should be suspended during periods of high winds.



This has been scored a Category 3 breach of the permit requirement as a result.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0031143**

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

Site	Bryn Posteg Landfill	Permit Ref	BU7766IC
Operator/Permit holder	Sundorne Products (Ilanidloes) Ltd	Date	11/01/2017

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			
E2	C3	<p>1. A permanent storage vessel for the DAF plant sludge should be provided, with secondary containment, as soon as possible.</p> <p>2. The area of sludge discharged to the blind ditch should be removed for appropriate disposal and this area of ground remediated.</p>	28/02/2017
B1	C2	<p>1. Reduce leachate levels back to within the permitted compliance limit as soon as is practicable</p> <p>2. Take measures as listed against condition 3.4.1 to reduce fugitive emissions.</p>	31/03/2017
F1	C2	<p>Use appropriate measures to reduce and minimise the emission of landfill gas and other sources of odour on site, including but not limited to:</p> <ul style="list-style-type: none"> - Identification and remediation of point source odour sources - Landfill gas extraction and control - Use of appropriate levels of daily cover - Use of temporary capping - Minimisation of odour from leachate treatment process 	31/03/2017
F3	C3	<p>1. Litter should be removed from the perimeter fence and surrounding fields as soon as is possibly practicable,</p> <p>2. Measures to ensure litter is not leaving site and that staff are appropriately training on when to suspend tipping operations should be implemented.</p>	28/02/2017

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.