

## Compliance Assessment Report

**Report ID:**  
**CAR\_NRW0034167**

**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	05/11/2018	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	Date issued	06/11/2018		

### 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	C2	3.1.7
	C3	3.1.5
E4 - Emissions - Sewer	C3	3.1.2
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	C2	3.7.1, 3.7.4
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C3	4.3.1, 4.3.2
	C3	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.

<b>Number of breaches recorded</b>	<b>7</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>109</b>
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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 (April - June 2018)

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.

A draft report was received on the 22/08/2018, 5 days after the second extension date agreed in writing by NRW (17/08/2018). A final version of the report was received on the 30/10/2018, more than 2 months after the second extension date.

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

**Action 1:** Ensure that reporting deadlines are adhered to and provide a copy of the relevant procedure(s) to NRW by 30/11/2018.

#### Notifications

Condition 4.3.1 (b) states that in the event of a breach of any permit condition the operator must immediately - (i) inform NRW, and (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time.

Condition 4.3.2 states that any information provided under condition 4.3.1 (b) (i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time specified in that schedule.

No Schedule 5 notifications were received by NRW for breaches identified during Q2 2018. Any breach of a permit limit should be notified to NRW immediately.

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

**Action 2:** Ensure that procedures are in place to ensure that breaches of permit limits are notified to NRW immediately and provide a copy of the relevant procedure(s) to NRW by 30/11/2018.

## In-waste landfill gas

In-waste landfill gas concentrations have been provided in this report as requested by NRW.

On the 22/08/2018, the day the draft report was received I e-mailed you regarding our significant concerns regarding the elevated carbon monoxide concentrations (>500 ppm) detected across Phase 9D throughout April – June. The current landfill gas management plan states that concentrations between 500 and 1000 ppm indicate “fire likely, further investigation required”. Action Plan C in the management plan outlines a number of measures should elevated carbon monoxide concentrations be detected.

I then asked you to ensure that the measures above had been followed, and to update NRW immediately regarding your findings.

On the 05/09/2018 you replied stating that “these issues are discussed within the report that was issued last Friday. We do not consider that there is any thermal event”. I replied on the same day, stating that “I have read the report and do not consider that this issue has been addressed. I still require a response to the questions”.

On the 21/09/2018 you replied stating that “We do not think that our GA2000 has been recording the CO correctly. It is about to go for service and calibration. We are waiting for the company to have a hire unit available to exchange with ours. We have reported our raw data to you, however the additional data taken by (Exea consultants) while he was on site and the ratios of other gases from our monitoring confirmed to us that we did not have an issue with any sort of thermal event. (Exea consultants) has analysed the gas data with an Environment Agency software tool ‘Run Gas’. These results are attached”.

Answers to my initial questions were not forthcoming, and so a Reg 61(1) notice requesting this information was issued to you on the 21/09/2018.

On the 01/10/2018 you replied, stating “We undertook specific monitoring for you at the end of last week to double check our CO results. Attached the results. You can see that our CO results are still elevated. These results were taken with a new H2S filter inline. We are waiting for a Service slot from Geotechnical Instruments, they have moved location and have a backlog of machines for service. I am told that we are moving towards the top of the list. You comment below that Action Plan C should have been implemented back in April. The action plan was actually implemented a number of years ago we have had elevated CO readings within Phase 9D for a number of years. We have undertaken bag samples and have observed temperature. We are confident that they are false high CO readings. It is the longstanding nature of this false reading that has lead us to request the meeting in the attached email sent last week”.

A further response was received from you on the 05/10/2018 stating “To clarify the response that was submitted below regarding the R61 Notice. Action Plan C is implemented if there is suspicion of a Fire. Using the other measurements and observations in the LFGMP we were confident that there was no fire. Action Plan C has not been implemented at Bryn Posteg this summer in response to our GA2000 gas monitor recording any CO concentrations. This extract is from our Permit, it is not specific about what form the investigation should take if a CO reading presents a number greater than 100ppm, our investigations have looked at paragraphs 6.4 from the Landfill Gas Management Plan. On Thursday 4 October Exea consultants were on site with their GA5000, this machine did not record any CO concentrations in excess of 100 ppm. On Thursday 4 October Exea Consultants took bulk gas samples from 3 of those wells with the highest CO readings. Results from these should be available next week. We have configured the rental GA5000 with the monitoring wells on site. We will record the CO readings for Phase 9D on site over this weekend”.

CO readings from wells in Phase 9D were forwarded to NRW on the 10/10/2018, all were below

30ppm. It is considered by the Operator that the elevated carbon monoxide readings are false, and due to volatiles within the gas “exaggerating” the readings.

This subject was discussed further at our meeting on the 25/10/2018, where you confirmed that you would be looking at revising your landfill gas management plan to consider volatiles interference with carbon monoxide readings.

**Action 3:** Operator to revise relevant section of the gas management plan and provide a draft to NRW for comment, by 31/12/2018.

### **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 18 monitoring locations, this is a decrease compared to Q1 of 2018, when methane permit limits were exceeded at all 36 monitoring locations. Carbon dioxide permit limits were exceeded on at least one occasion at 27 monitoring locations, this is the same number as in Q1 of 2018. 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 maximum concentration of methane in perimeter boreholes of 79.4 % 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.**

At our meeting on the 25/10/2018 we discussed your proposal to address gas migration from Phases 1 and 2 using a gas drainage trench.

**Action 4:** A CQA Plan for the proposed gas drainage trench should be sent to NRW by 30/11/2018.

### **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 370 mg/l.

**This breach has 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.

### **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 "multiple

obstructions within a number of primary extraction sumps".

Condition 3.7.1 states that the Operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring of leachate specified in Tables S3.1 and S3.9.

Samples were not collected at LCP3, LCP6, RMLP9A, RMLP9B, RMLP9C and RMLP9D in April.

**These breaches have been scored a CCS Category 2 breach of permit.**

**Action 5:** A permanent means of access to enable monitoring shall be provided at all leachate sumps immediately.

**Action 6:** Leachate levels should be recorded in all wells listed in Table S3.1 and provided to NRW in future monitoring reviews.

**Action 7:** Paragraph 3.1.3 outlines that investigations of the site infrastructure during April and May 2018 have identified issues with leachate dipping. A Regulation 61(1) notice regarding this was issued on the 27/09/2018. The Operator should respond to this notice by the required date.

### **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 or P2 during the review period.

**Action 8:** Although no permit limits were exceeded during this review period, we have concerns regarding the potential for further surface water contamination due to the lack of control measures at the site. An enforcement notice regarding this was issued on the 25/09/2018.

### **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. Monitoring data submitted shows that emissions to sewer breached the permit limits for pH, COD and total TPH.

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

**Action 9:** The report outlines that the suitability of the current analysis method for TPH for comparison to the visible oil compliance limit is currently under review. Operator to send to NRW the results of this comparison by 30/11/2018.

A total of 6,020 m<sup>3</sup> of treated leachate was discharged during Q2 2018, which is a slight decrease on the 6,121 m<sup>3</sup> discharged in Q1 2018.

### **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, non-conformances 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 the majority 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.**

**Action 10:** The operator shall ensure that site activities are managed and operated in accordance with the approved written management system immediately.

### **Observations**

As previously outlined, whilst the monitoring report format is acceptable, further explanation should be included as to the potential reasons for the breaches of the permitted limits, and why any monitoring requirements have been omitted.

For example, it is not stated why LCP3, LCP6, RMLP9A, RMLP9B, RMLP9C and RMLP9D not sampled in April.

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0034167**

**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	05/11/2018

### 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			
G4	C3	See comments section	30/11/2018
E4	C3	See comments section	30/11/2018
E2	C2	See comments section	30/11/2018
E2	C3	See comments section	30/11/2018
C2	C2	See comments section	30/11/2018
G1	C2	See comments section	30/11/2018
G4	C3	See comments section	30/11/2018

## 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](mailto: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.