

Compliance Assessment Report

Report ID:
CAR_NRW0033686

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	27/06/2018	Time in	11:40	Out	14:45
Assessment type	Site Inspection				
Parts of the permit assessed	All below				
Lead officer's name	Ellis, Rhys				
Accompanied by	Kelk, Matthew				
Recipient's name/position	David Williams / Technical manager	Date issued	27/07/2018		

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
B1 - Infrastructure - Engineering for prevention and control of emissions	C2	2.9.1
E1 - Emissions - Air	C2	3.1.1

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	2	Total compliance score (see section 5 for scoring scheme)	62
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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

The main aim of the inspection was to assess general progress in relation to some of the issues noted during the audit on site on the 18th and 19th April 2018 (Mainly in relation to gas collection infrastructure).

This CAR form will summarise observations and issues below (which were also discussed on site with David Williams site technical manager and Keiron Finney and Velma Finney of Exea Associates Limited).

Wind direction was from the easterly direction and a pocket of a slight to moderate landfill gas odour was detected off-site on the main road to the west of the site (Not far from the composting pad).

It was noted that works to improve the sites landfill infrastructure have recently been undertaken.

You have also subsequently indicated that the uplift to the gas compound is around the 950m³/hour level, this is based on the usual assumptions. (Please could you confirm the exact uplift when your responding to the Actions below).

The height of leachate chambers in Cell 9D/E have been reduced. Sealing works have also been undertaken on the leachate towers using the SGG harena sealing system.

Despite this work, the Gazomat analyser confirmed that some of the leachate wells/towers were still emitting high levels of methane (up to 40%). Please see below summary of readings observed during the visit. Methane emission readings were done on the inner and outer section of the leachate chamber seal. Velma Finney was also on site and was measuring emissions with a Gazomat concluding similar patterns and results.

9C Chamber south

Inner – 100ppm max

Outer – 2000ppm max (0.2%)

9D South

Inner -30ppm

Outer – 30ppm

Couple of meters away on surface 135ppm

RMPL9C

Inner 5000ppm (0.5%) max - near crack in joint of ring

Outer- 240,000ppm (24%)

Outer 440,000 (44%) (max detected at one point)

Readings seemed to pulse and vary

Velma Finney also confirmed 26% on her Gazamat

It is thought likely that this area contributed to the odour detected off site

RMPL9D

50ppm max - Inner

Outer 155,000 max (15.5%)

Chamber closer to WTS

Inner 900ppm max

Outer 160,000 (16%) max

It was noted that there was 'initial spiking' with majority of readings.

ACTION 1

Agreed on site that operator to investigate and undertake further works to prevent elevated methane emissions from leachate towers. Site was requested to submit proposal for the works no later than Tuesday 3rd July 2018 . This was received on the 3rd July 2018

ACTION 2

It was agreed on site that site would undertake further methane emission surveys around the inner and outer sections of the leachate chamber seals once Action 1 has been completed. Site to also undertake Gas Analyser readings from all leachate chamber wells along with readings of the main inlet to the gas compound and forward these to Natural Resources Wales. It was discussed that the leachate chambers investigation report would be submitted by 6th July 2018. This report will take into account the conclusions of recent survey measurements and the reduction in the height of the leachate chambers. The submission date has been extended to 27th July 2018.

Emission readings were taken around the entrance of cell 9 and from areas along the leachate trench. Highest readings detected in this area today were around 2% (20000ppm) methane. The leachate trench was completely dry.

Improvements have been undertaken on the northern side of cell 9. Two horizontal gas collection pipes have been installed. One was partially opened on the morning of the visit and the other still remains closed as further works are planned to increase gas collection in this area, which Kieron Finny is currently designing a sketch for imminently.

One of the proposals you have previously considered is , to install a length of pipe to allow perimeter leachate to flow through the area. The site will then cover the pipe with a silty clay and dress the waste flank to give a uniform profile, and then lap some 1mm HDPE over the toe drain and up the flank.

ACTION 3. The operator was asked to submit proposal for the above no later than 6th July 2018. Site advised that works (depending on approval) could start week commencing the 9th July 2018. However to date this proposal has not been received. NRW have been advised that this will now be received on the 27th July 2018. This response should include timescales.

B1 – Engineering to control Emissions

Despite works to improve gas collection, point source emissions and issues associated with gas management infrastructure resulting in passive venting of gas are still present on site resulting in breaches of permit condition 2.9.1

Condition 2.9.1 stipulates that the operator shall take measures, including, but not limited to, those specified in any approved landfill gas management plan, to:

- (a) Collect landfill gas; and
- (b) Control the migration of landfill gas

Further improvements are required in regards to gas collection. As a result, a CCS score of 2 is applied. (Please also refer to note below)

E1 – Emission to air

In addition to this as a result of unauthorised point source emissions to air from sources such as the leachate towers condition 3.1.1 of the permit has been breached. This condition stipulates that there shall be no point source emission to air except from the sources and emission points listed in schedule 3 of the permit. As a result a CCS score of 2 has been applied.

PLEASE NOTE : NRW may review these CCS 2 scores for this specific CAR form depending on the outcome of the report that is to be submitted by the operator imminently detailing the results of the improvements to the leachate chambers and also depending on the further improvements planned for the northern side of cell 9 and further inspections by NRW to assess these progress.

Other improvements.

Gas well 300 has been shortened and condensate trap removed. There is now a pump located inside the well. Methane emission readings around the base of the well varied and were reaching levels of 3000ppm. This well should however be monitored closely for pressure and emissions.

Other works were noticed on site which included repairs to Sump 9X, the main purpose of which is a collection of gas condensate from 3 lines. The previous concrete sump was perishing and its infrastructure failing and gas emissions had been detected by Caulmert at this location. This has now been replaced with a plastic sealed sump in an attempt to improve gas emissions from this chamber.

Please ensure that this area is continued to be monitored closely for any further gas emissions.

Works have also been undertaken on Sump 1 to seal and contain gas emissions (this was an open chamber). The site may be considering a bentonite skirt around the sump to improve its robustness in gas collection. Please note, even though this chamber is sealed there is no gas extraction from this sump and it is imperative that the site monitors gas build up and emissions from this chamber. Gas collection measures might need to be considered if gas emissions are persisting.

It was also acknowledged that other works have been undertaken on site following the audit on the 18th and 19th April 2018 such as instalment of automatic condensate traps and improvements to the falls of the gas infrastructure pipework on site.

These works will be inspected in more detailed in future visits (Tony Roberts is likely to be present in this visit) .

Photograph 1. Example of a SGG harena sealing system used on site as a measure to improve control of gas emission from the leachate chamber towers on site.



Photograph 3 and 4 – Example of one of the leachate chambers reduced in height, with photo of concrete rings taken out to reduce the height of chambers on the right-hand side



Photograph 5. Two horizontal gas collection pipes have been installed on the northern side of the cell



Photograph 6. Illustrating the direction of the new horizontal wells installed (i.e. to the south under haul road)



Photograph 7 and 8. Recent ongoing works to Sump 9X's infrastructure to reduce gas emissions on site. Photographs on the right-hand side illustrates the infrastructure that has been replaced



Photograph 9.
Improvements to sump 1



EPR Compliance Assessment Report

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Site	Bryn Posteg Landfill	Permit Ref	BU7766IC
Operator/Permit holder	Sundorne Products (Ilanidloes) Ltd	Date	27/06/2018

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			
E1	C2	Refer to Actions in CAR form	27/07/2018
B1	C2	Refer to Actions in CAR form	27/07/2018

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. 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.