

**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	16/05/2019	Time in	11:00	Out	14:15
Assessment type	Report/Data Review				
Parts of the permit assessed	All mentioned below				
Lead officer's name	Ellis, Rhys				
Accompanied by	McClymont, James				
Recipient's name/position	David Williams / Tony Webber/ Technical manager/Site manager	Date issued	14/08/2019		

### 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
A1 - Specified by permit	C2	2.1.1
B1 - Infrastructure - Engineering for prevention and control of emissions	C3	3.2.1
C4 - General Management - Storage, handling labelling and Segregation	C3	3.1.1
	C3	3.2.3

**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>4</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>43</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

The main purpose of the visit was to assess progress in relation to the installation of leachate extraction/monitoring chambers.

### Odour

Weather was dry with a slight breeze. Wind direction was southerly. NRW noticed a slight landfill gas odour outside the site in the vicinity of Bryn Posteg Hill.

### (B1) Engineering for prevention and control of emissions

#### Leachate monitoring/extraction chambers

It was encouraging to see that progress was being made on the installation of the leachate monitoring/extraction chambers. In summary it was observed that 4 leachate chambers had been installed:

**LCP 2** – Installed and connected to gas collection system. It was also confirmed that a leachate pump has also been installed, and records are being kept of the amount of leachate that is being pumped out



**Photograph 1** - Newly installed LCP2

**LCP3**- Installed and connected to gas collection system. It was also confirmed that a leachate pump has also been installed, and records are being kept of the amount of leachate that is being pumped out.

**LCP6** – Leachate chamber installed including temporary seal.

You advised that this chamber requires further works, including gas connection and leachate pump installation etc. Please could you keep us update on these matters. You advised that SGG were due on site week after the inspection.

**RMLP9C** – Leachate chamber installed. This also requires completion, including gas connection and leachate pump installation etc. Please also note that there was evidence of gas build up here as the cap was starting to convex.

Operator was advised to monitor this chamber closely in the interim to ensure there is no point source emission and keep NRW updated on progress.

Whilst on site today it was explained that the drilling for leachate chamber **9B West** was undertaken at the incorrect location, and a Gas well will be installed in its place at this location. The leachate chamber will be installed on the correct location as marked with a peg on site in due course.

**9D** was going to be drilled next, this will give opportunity for a platform to be created for the drilling rig for chamber **9B west** mentioned above.

**ACTION 1** : Please can the CQA engineers keep us updated on the above, and as discussed it would be useful if we could receive

weekly updates on progress, as agreed previously.

**Please note :** The CQA engineer explained that there will be changes to locations for some of the drilled chambers (for example sump 9B). Any deviation from the location highlighted in the CQA plan should be documented with information detailing why they have changed and information to support the new locations. Associated tables and plans etc should also be updated and forwarded to NRW as soon as possible . This is information that will also be required in the final CQA report.



**Photograph 2** - Drilling operation at Bryn posteg.

#### **F1 - Odour/emission sources (RMLP9C North).**



**Photograph 3** - A potential point source emission was noted from chamber RMLP9C North

A potential point source emission was noted on this chamber (heat haze observed), particularly around a pipe on the headworks.

**ACTION 2 :** Please can the site investigate this and take the necessary action to prevent any emission/odour from this chamber. This chamber might be a contributing factor to the odour detected off site. Operator to update NRW with actions taken no later than 28th June 2019.

Condition 3.2.1 of the permit stipulates that emission of substances not controlled by emission limits shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.

Appropriate measures were not in place to contain gas emissions. Therefore, this condition has been breached. In the absence of GAZOMAT survey results, a CCS score of 3 is applied on this occasion. However please note, due to the polluting nature of landfill gas there is a risk of a CCS 2 breach (potential significant environmental effect) from this chamber.

#### **Incoming flows to leachate balancing lagoon.**

The operator mentioned that as a result of an odour investigation work on the morning of the visit, adjustment had been made to the incoming leachate pipes to the balancing lagoon to reduce odour. David Williams advised that further investigations will be carried out in relation to this (for example the condensate discharge pipe that currently discharges into the same lagoon).

**ACTION 3 :** The conclusion of these investigations should be forwarded to NRW (including any further improvements highlighted) no later than 28th June 2019.

#### **Gas extraction in 9D.**

Significant gas bubbling was observed in certain locations of this area indicating emissions of landfill gas.



**Photograph 4** -Significant gas bubbling on Phase 9D

**ACTION 4** : Please can the operator investigate gas management and control in this area and feedback to NRW. As discussed on site, Gas Management should be monitored carefully in this location and every effort should be taken to improve gas extraction efficiency to avoid breaches of permit. Your last dipping survey indicated that leachate levels with the gas wells were high which could considerably reduce gas extraction efficiency. The operator was asked to respond by 29th May 2019, however no response has been received. Please can you provide a response to this action no later than 28th June 2019.

**ACTION 5**: David Williams advised that another round of dip monitoring (Dip to water and dip to base) will be undertaken by the operator and forwarded to NRW as part of the investigation to the action above. Please also include the gas balancing data. In your response could you please add a column detailing actual drilled depth for each gas well you dip and confirm which Gas Wells correspond to what Gas Well reference number (drill log) in the CQA report as the reference numbers differ. The operator was asked to respond by 29th May 2019, however no response has been received. Please can you provide a response to this action no later than 28th June 2019.

**ACTION 6** : Operator to submit a proposal for the further work on the northern end of cell 9. The operator was asked to provide an update no later than 7th June 2019, however no response has been received. Please can you provide a response to this action no later than 28th June 2019. This has now been an outstanding action for a considerable amount of time, and was also one of the actions requested under the enforcement notice issued to the operator which has now expired.

#### **A1 Specified activities Contaminated oversized green waste**

##### **Contaminated oversized green waste**

Work has commenced on removing the deposit of oversized un screened green waste located on the capping of the landfill, NRW were advised on site that a third has been removed off site. Please keep us updated on this matter.



**Photograph 5** - Removal of oversized un screened green waste

##### **Storage of compost .**

There seems to be a significant amount of additional compost that has been stockpiled on the cap. You have confirmed that the majority of this compost does not meet PAS100 and is therefore waste. The deposit of this waste is a breach of the suspension notice.

In addition to this, due to the quantity of waste compost stored, there is a risk of runoff entering controlled waters. Run off from this stockpile has previously been witnessed. The other concern is the potential fire risk exacerbated by the fact that it is stored in one single pile with no fire breaks.

Permit condition 2.1.1 stipulates the operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the activities). Storing waste on the cap of the landfill is not a permitted activity.

Please also note that storing material on the cap in this manner has the potential to damage the capping infrastructure on this location.

As a result, a CCS breach of 2 is applied on this occasion due to the breach having a potentially significant environmental effect

(Runoff to controlled waters, fire risk and damage to landfill cap exacerbated by the quantities and duration the compost has been stored here)

**ACTION 7.** Operator to detail what actions will be taken in regard to the composted material urgently. Please respond no later than 28th June 2019.



**Photograph 6 and 7** - Significant amount of waste compost stored on landfill cap.

#### **C4- Storage, handling, labelling and segregation**



**Photograph 8.** IBC containing Ferric Chloride and Sodium Hydroxide stored on permeable base

IBC's containing Ferric Chloride and Sodium Hydroxide were being stored on permeable base with no secondary containment. It was noted that there were fewer IBC that last inspection, but there remains to be still breach of permit condition. Condition 3.2.3 stipulates that all liquids in containers, whose emissions to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise leakage and spillage from the primary containment.

A CCS score of 3 is applied on this occasion.

The operator is proposing to construct a bulk storage facility with sealed drainage to resolve this issue.

**ACTION 8 :** Operator to confirm what temporary arrangements will be put in place for the safe storage of IBC on site until long term solutions are undertaken by 28th June 2019.

**ACTION 9 :** Operator to provide information on the long term proposals for the safe storage of these chemicals to comply with relevant permit conditions and best practice with timescales. A storage bulk tank was proposed by the operator. Please note that the operator should also consider containment in the delivery area of any bulk storage by 31st July 2019.

Please note that you are likely to need to submit a permit variation application for these new improvements, as this new storage facility may be regarded as a directly associated activity and is a change in operating techniques. As part of this application you will require to submit a new plan and details of design and specification etc for NRW to consider, and also confirm in your application what activities on site these chemicals will serve. It may be prudent to include this with your proposed surface water management permit variation.

Below are some links providing additional information on containment systems for the prevention of pollution

[https://www.ciria.org/Resources/Free\\_publications/c736.aspx](https://www.ciria.org/Resources/Free_publications/c736.aspx)

<http://www.netregs.org.uk/media/1693/gpp-26-safe-storage-of-drums-and-ibcs.pdf>

#### **Other progress/ development on site:**

##### **Contaminated runoff from phase 1**

There was no discharge flowing from an excavated area within phase 1 today. It appeared that the liquid level within the excavated hole was low (as seen in photograph below). As discussed please continue to monitor this closely, there was other evidence of localised dampness in the ground in this area, please ensure that there are no other point source emissions from this area which

could impact surface water.



**Photograph 9.** Contaminated water within phase 1

#### **Overflow of sludge from the Leachate treatment lagoon**

During my last inspection there was evidence that sludge had been overflowing from the leachate treatment lagoon. This had overflowed down the embankment and into the temporary sump constructed below the lagoon.

#### **Emergency works**

It was noted that repair works had now been undertaken on the emergency works on phase 9D



**Photograph 10.**

Surface water (Eastern)



**Photograph 11.** Surface water drain by weighbridge

There was minimal flow deriving from site today.

#### **Containment of effluent around Leachate treatment plant.**



**Photograph 12.** Runoff of leachate to ground around the leachate treatment plant.

There was still evidence of runoff of leachate to ground around the leachate treatment plant. Although some additional hardcore material has been used to construct a bund this unfortunately is impermeable and is still seeping to ground and still breaching relevant permit conditions. Permit condition 3.1.1 stipulates that there shall be no point source emission to land except from the

sources and emissions points listed in Schedule 3.

As a result, a CCS breach of 3 is noted.

**ACTION 10.**

Operator to ensure that leachate is contained around the leachate treatment plant, and operator to provide an action plan for a long-term solution for this issue no later than 28th June 2019.

**Leachate chamber 9x**



**Photograph 13** Leachate chamber 9x

During a visit in February there was evidence that leachate had been overflowing from 'Sump 9x'. There was significant scorching and localised erosion around the chamber indicating evidence of previous significant discharges. The area was dry today and you have subsequently advised in a response dated 10th May that 'The chamber contains an electric pump. The electricity is provided by a generator. This generator is reducing in reliability. We have therefore issued an instruction to our site electrician to install a mains electric connection down to this facility to reduce this risk.'

**ACTION 11**

Please provide an update in regards to the above works no later than 28th June 2019.

Leachate from each sump in phase 9 is pumped into leachate chamber 9x before being pumped onwards to the leachate lagoon (as explained in your Leachate management plan).

It is our understanding that if there is a pump failure within chamber 9X, there would be build up of high strength leachate within the sump which would eventually overflow to an area that has a direct pathway to surface water causing a significant risk of pollution to ground and surface water.

**ACTION 12**

Operator to confirm what measures are in place to inform the operator if there is a failure with the pump at chamber 9x before there is a discharge to ground/surface water. Please respond no later than 28th June 2019.

**ACTION 13**

In addition to the risks mentioned above, this chamber is also not sealed and is therefore potentially venting to atmosphere. What measures will be taken by the operator to reduce the risk of emissions to air? Please respond no later than 28th June 2019.

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0035244**

**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	16/05/2019

### 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			
C4	C3	See actions in car form	28/06/2019
C4	C3	See actions in CAR form	28/06/2019
B1	C3	See actions in CAR form	28/06/2019
A1	C2	See actions in CAR form	28/06/2019

## 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.