

## Compliance Assessment Report

Report ID:  
CAR\_NRW0033205

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	20/03/2018	Time in	14:00	Out	17:00
Assessment type	Site Inspection				
Parts of the permit assessed	All below				
Lead officer's name	Ellis, Rhys				
Accompanied by	McClymont, James				
Recipient's name/position	David Williams/ Technical Manager	Date issued	16/04/2018		

### 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
C1 - General Management - Staff competency/training	C2	1.1.1
E1 - Emissions - Air	C2	3.1.1
E3 - Emissions - Surface water	C2	S3.2
F1 - Amenity - Odour	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.

<b>Number of breaches recorded</b>	<b>5</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>155</b>
------------------------------------	----------	---	------------

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

Present on site today from Natural Resources Wales were regulating officers Rhys Ellis and James McClymont, Industry Regulation team leader Julia Frost, Operations Manager David Powell and Principal Solicitor Jane Chapman.

Weather was dry and cold

A CODE B notice was issued on site reference 00183.

A selection of photographs to illustrate some of our observations can be seen in appendix 1

The following breaches/observations were noted during our inspection -

Whilst walking up past the low spot of Cell 9D(ii) opposite the MRF there was still significant amount of leachate visible and flowing/cascading out of the flank and into the collection sump.

Although it was contained at the time of the visit, there is a risk of containment in this area and requires careful management.

However a number of leachate outbreaks were noted on the outside of the clay bund on the haul road up to Phase 9. Leachate was seen to be running down the haul road towards the MRF. This indicates a loss of leachate containment, which should be investigated.

Leachate ponding was also noticed around the base of some of the gas wells in phase 9.

**ACTION 1 :** As per previous CAR form request, please can the site investigate the cause of this leachate outbreak from the waste mass and feedback to Natural Resources Wales. Previous deadlines in CAR forms have stipulated no later than 16th March 2018.

**ACTION 2 :** Site to investigate these minor leachate outbreaks noted above and feedback actions taken immediately.

### **E1- Emissions Air**

#### **B1- engineering for prevention and control of emissions**

We noted that leachate wells/towers (in particular 3 towers) were emitting significant methane emissions. This issue was brought to your attention during our last inspection on site on the 23rd February 2018.

We detected a significant methane concentration of 431,000 ppm (43.1 %) being emitted from one of these towers during this visit. These towers should be connected to the gas extraction system as a matter of urgency, as they are a source of gas emissions which are likely to contribute to offsite odour.

**ACTION 3.** Site to connect leachate towers to gas extraction system immediately and inform Natural Resources Wales of when this is complete. Please note date in section 4 of CAR form stipulates 21/03/2018, which should be read as Immediately.

Also noted were methane emissions of up to 273,000 ppm (27.3 %) emanating from several holes along the access track on Phase 9, noticed due to bubbling standing water above the holes. Landfill gas management in this area should be investigated as a matter of urgency.

**ACTION 4.** Site to look into this and feedback findings and actions taken to control emissions from this area. Please respond no later than 20th April 2018

A methane concentration of 470,000 ppm (47.0 %) was detected at perimeter borehole G37. Recent monitoring data (Oct – Dec 2018) indicates that methane concentrations in this borehole were 2000 ppm (<0.2 %) throughout the quarter.

**ACTION 5.** This elevated concentration should therefore be investigated immediately and the operator should feedback to Natural Resources Wales. Natural Resources Wales will be looking into this matter further as part of the Audit planned on site for the 18th and 19th of April 2018.

A methane concentration of 5000 ppm was detected at a riser to the south of Phase 9.

**ACTION 6.** This emissions noted on the riser on the phase 9 should be investigated and an update provided to Natural Resources Wales detailing findings and actions taken. Please respond no later than 20th April 2019.

It was noted that the gas leak at well GW34 has been repaired.

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.

The operator has not taken appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan to prevent these emissions noted above. As a result a CCS score of 2 is applied.

Condition 3.1.1 has also been breached as it stipulates that there shall be no point source emissions to air except from the sources and emission points listed in schedule 3 tables S3.2, S3.3 and S3.4. Significant Point source emissions were noted i.e Leachate towers. As a result a CCS score of 2 has been applied.

#### ACTION 7

You have subsequently advised that amongst some of the actions you will be undertaking imminently are:

- The likelihood of the installation of temporary horizontal collectors.
- SGG are due on site to undertake connections to the concrete towers in the operational area
- Actions to complete works on bentonite seals around wells drilled last year in Phase 9.

Please provide an update in relation to these matters no later than 20th April 2018.

#### F1 Odour.

During the inspection, significant landfill gas and leachate odour was detected at several points across the site.

As we were walking around the southern end of Phase 9, we detected a strong leachate odour. We walked up onto the crest of the waste mass and observed a large volume of brown liquid, thought to be leachate, being sprayed across the waste mass from a tanker.

ACTION 8: Could you please confirm the origin of this material being sprayed and why this operation was being undertaken? The liquid was being sprayed several metres into the air, which created considerable odour. Please respond no later than 20th April 2018.

Leachate should not be sprayed in such a way as it is odour forming and would emit ammonia and other constituents into the air.

Re-circulation must be agreed with us in writing and usually takes the form of a trial which is designed and planned with monitoring and feedback.

As such this practice should stop immediately.

Condition 3.3.1 has been breached as Odours detected from the leachate spreading are likely to cause pollution outside site, it must be noted that the activity of surface spreading leachate on landfill waste mass is not best practice and as such is not deemed appropriate measures for dealing with leachate. The risk of odour being at levels to cause pollution outside the site has been exacerbated by the fact that there is significant odour emanating from the unconnected leachate towers and from other points in and around cell 9 (mentioned earlier in this CAR form). It must also be noted that Natural Resources Wales did receive an odour complaint on this day.

All of the above as a consequence has attracted a CCS Score of 2.

#### E3- Emissions to water.

It was suspected during the visit that the quality of surface water being discharged offsite to the west and east may have breached the permitted emission limits, both discharges appeared to be turbid. We collected formal samples, and provided you with one of each. We can confirm the results as follows:

P1: BRYN POSTEG EASTERN SW DISCHARGE. SN 97338 82212				
Parameter type	Permit limit	Value	Unit	
0085 / BOD ATU	20	<3	mg/l	
0111 / Ammonia(N)	0.25	3.47	mg/l	
0135 / Sld Sus@105C	50	27	mg/l	

P2: BRYN POSTEG WESTERN SW DISCHARGE. SN 96461 81888				
Parameter type	Permit limit	Results	Unit	
0085 / BOD ATU	20	<3	mg/l	
0111 / Ammonia(N)	0.25	<0.5	mg/l	
0135 / Sld Sus@105C	50	84	mg/l	

Results confirm that suspended solids had marginally breached on the western discharge P2.

Suspended solids were within permit emission limits within P1, However ammonia had breached significantly being 13 times the permit limit.

As a result of the above emission limit value breach stipulated in table S3.3 (particularly the significant exceedances in relation to

ammonia) a CCS breach of 2 has been noted.

**ACTION 9.** Operator to investigate the source of this Ammonia and suspended solids exceedances and confirm what actions, measures and contingency plans have been taken to improve surface water quality from P2 and P1 to avoid future breaches of limit values stipulated in permit. Please respond no later than 30th April 2018.

**ACTION 10:** Site to confirm whether increased monitoring has been implemented on site following the detection of these breaches of emission limit values , including breaches noted in previous CAR forms.

**PLEASE NOTE:** Condition 3.7.4 of the permit stipulates that permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to emission points including Table S3.3 which references surface water emissions. NRW were unable to gain access to the sites main sample point for P2 due to site not able to open the manhole due to absent manhole keys. Please ensure that there is permanent means of access at all times for sample point P2 in future.

#### **C1- General Management – Staff competency/ training**

Permit condition 1.1.1 stipulates that the operator shall manage and operate the activities in accordance with a written management system and using sufficient competent persons and resources. The permit breaches noted in this compliance assessment report form raise concerns about the awareness of permit conditions, management systems and associated procedures and plans by the directors and relevant site personnel. There appears to be a lack of understanding of the permit requirements and a failure follow relevant procedures resulting in breaches of permit conditions which have led to pollution of environment:

- Gas management and inadequate gas collection for prevention of gas and odour emissions as mentioned above.
- Failure to take measures under permit condition 4.3.1 (b) in that, in the event of any breach of permit condition the operator must immediately take the measures necessary to ensure that compliance is restored within the shortest possible time. An example would be the leachate towers not being connected for a long period of time and ongoing non- compliance with suspended solids and ammonia within the sites discharge.

\*Spreading of leachate on the waste mass which is not best practice and contributes to issues such as odour . This spreading activity is also not being carried out in accordance with your leachate management plan.

As a result a CCS score of 2 has been applied on this occasion.

#### **B1- Engineering to control emissions.**

Stockpiled soil (which appeared to be waste) was observed on the geo membrane and geotextile capping during our inspection (see photographs). Large sharp objects were noticed in the stockpile such as large sharp rocks, steel, wiring and wood which could damage the capping membrane.

#### **ACTION 11**

Please respond and provide the necessary information to address the following points by no later than 20th April 2018

- The purpose of this material stored on the geomembrane and geotextile.
- What is this material or waste?
- The source of this material
- When was It deposited
- Supply copies of documentation/waste transfer notes for this material.

Once we receive this information we will consider whether there are any breaches of permit conditions / suspension notice that is in place for the site.

#### **Effluent Treatment Plant - DAF plant.**

It was noted during the inspection that the DAF unit was not operational during our visit. It was explained that the reason for this was the fact that it was switched off. It was switched immediately back on when officers draw the operators attention to the issue.

#### **ACTION 12**

Please could the site clarify why such critical piece of equipment was switched off? Who is responsible on site in maintaining and managing this equipment? Are there daily checks/inspection undertaken on this piece of equipment. If there are please can you forward a copy no later than 20/04/18.

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0033205**

**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	20/03/2018

### 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			
B1	C2	Connect leachate towers IMMEDIATELY to gas infrastructure to enable gas collection and refer to Actions 4-7 in CAR form.	20/04/2018
E1	C2	Connect leachate towers to gas collection infrastructure IMMEDIATELY and ensure efficient gas collection from these towers.	21/03/2018
E3	C2	Comply with permit limits and refer to Actions 9 and 10	20/04/2018
C1	C2	Improve awareness of your permit conditions and associated environment management system and associated procedures with immediate effect and ensure actions highlighted in CAR form are undertaken as a matter of urgency.	20/04/2018
F1	C2	Connect leachate tower to gas collection infrastructure IMMEDIATELY and ensure efficient gas collection from these towers, stop spreading leachate/odours material on landfill IMMEDIATELY and refer to Actions 4 to 8 of CAR form	20/04/2018

## 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.