

Compliance Assessment Report

Report ID:
CAR_NRW0032922

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	30/01/2018	Time in	10:00	Out	14:00
Assessment type	Site Inspection				
Parts of the permit assessed	All Below				
Lead officer's name	Ellis, Rhys				
Accompanied by	McClymont, James,Zachary, Aled				
Recipient's name/position	David Williams/ Technical Manager	Date issued	22/02/2018		

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
B4 - Infrastructure - Containment of stored materials	C2	3.2.1
C1 - General Management - Staff competency/training	C2	1.1.1
E2 - Emissions - Land and groundwater	C3	3.2.1
E3 - Emissions - Surface water	C2	3.1.2
F1 - Amenity - Odour	C2	3.3.1
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C2	4.3.1

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	7	Total compliance score (see section 5 for scoring scheme)	190
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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

Present on site today from Natural Resources Wales were regulating officers Rhys Ellis, Aled Zachary and James McClymont.

Prior to visit on the site a perimeter inspection was carried out around site. Wind direction was from south west and a strong persistent landfill gas odour was noticed on the lane between Tywelfa and the entrance to Bradnant Equine centre.

We also checked the Nant y Bradnat which flows from the eastern side of the site and noticed a discoloration in the watercourse off site (cloudy greyish appearance).

We then progressed to site and met with Tony Webber (site manager).

The following breaches/observations were noted during our inspection today-

Leachate heads/levels.

Whilst walking up past the low spot of Cell 9D(ii) opposite the MRF significant amount of leachate was visible flowing/cascading out of the flank and into the collection sump. Although it was contained at the time of the visit due to the issues noted with the leachate treatment and storage lagoon there is a risk of loss of containment in this area too.

ACTION 1 : Please can the site investigate the cause of this leachate outbreak from the waste mass and feedback no later than 16th March 2018.

B4 – Containment of stored materials.

Leachate treatment plant.

It was evident that the effluent treatment plant was overwhelmed and there was evidence that the leachate storage lagoon had overtopped recently with flow marks present down the earth bank to the lagoon. Both the storage and treatment lagoons were noted as being extremely full/at capacity. We recommended to Tony Webber (Site manager) that the site consider tankering the excess leachate in the treatment system away as soon as is practicable to prevent further loss of leachate to surface water. This requires your immediate attention.

Condition 3.2.1 of your permit requires 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, including, but not limited to, those specified in any approved emission management plan.

There was evidence of lack of appropriate measures to prevent or minimise leaks and spills on site. There were no apparent safeguards in place to prevent or minimise spillages from the lagoon and there was evidence that leachate (which is highly polluting) has been overtopping and remnants were found in the surface water on site. There was no free board in either of the lagoons.

A subsequent visit by Environment Officer -Tim Arlett (Natural Resources Wales) the following day (31/01/2018) confirmed a further loss of containment of leachate from that lagoon. Formal water samples were taken from the eastern arm ditch below the leachate lagoons which had an extremely high level of ammonia N at 94.4 mg/l (milligrams per litre). During his visit, leachate within the lagoons was lapping over and there was no evidence of efforts to tanker leachate off site to reduce further risk of environmental impact.

Ammoniacal nitrogen as N, is a measure of the amount of ammonia, a potentially toxic pollutant found in landfill leachate, waste products, such as sewage, farm manure and slurry and other liquid organic waste products. Ammoniacal nitrogen as N is a key indicator chemical used to measure the quality of water in rivers. Unpolluted rivers that would be considered as 'high' quality would typically have an Ammoniacal nitrogen as N of less than 0.3 milligrams per litre and any value greater than 2.5 milligrams per litre would be considered indicative of 'poor' water quality in rivers. Results from samples taken on the 31/01/2018 are over 300 times what would be considered good quality and 37 times what would be considered a poor quality river

ACTION 2: Please can the operator provide details of measures taken to prevent further leachate containment failures from the lagoons in future. Please provide a response no later than 16th March 2018.

ACTION 3 : Operator to confirm what actions was taken following our visit on the 30/01/2018 and the subsequent visit on the 31/01/2018 and provide details of tanker loads for leachate tankered off site with dates and times including supporting

information if applicable. Please provide a response no later than **16th March 2018**.

As a result of the above breach a **CCS score of 2** has been applied under condition 3.2.1

E1- Emissions Air

B1- engineering for prevention and control of emissions

There was several non-point source emission to air that has the potential to pollute the air on Cells 9D(i) and 9D(ii). We identified four leachate towers/monitoring points that were actively emitting very high levels on landfill gas; many of the gas wells that were drilled before Christmas 2017 but have yet to be connected to the gas extraction system are also now acting as point sources. A landfill gas well also appeared to have been driven over and broken and was actively venting to atmosphere. We recommend these sources are connected to the extraction system as soon as possible to prevent further significant off site odours and impact on local residents.

Please note up to 60% methane (600,000ppm) was recorded from leachate tower(s) on the active cell and 47% (470,000ppm) from the waste surface. 10,000ppm ambient at cell entrance to 9D(ii) and 2000ppm at the Crest of Phase 9C downwind of the operational cell.

We also recorded 3.5% methane gas from the manhole of the groundwater drainage on Phases 1 & 2. This is adjacent to the eastern surface water discharge point to the Nant-y-Bradnant. Odour were detected in this area too. Also recorded 54% methane from a gas leak from the capping boot detail of GW34 and odour present downwind

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, these specified in any approved landfill gas management plan to prevent these emissions. As a result a **CCS score of 2** is applied.

It was noted in an email by the operator on the 31st January that the gas infrastructure was being worked on the following day (1st February 2018) and that the company SGG will be on site to connect both the new wells, the leachate sumps and then remedy the damaged well.

ACTION 4: Please confirm no later than 23rd February 2018 that this work is now complete.

ACTION 5: Please investigate and feedback actions taken in regards to gas emissions recorded at phases 1 and 2 and GW34 at the top of the site and any other sources of gas emissions from site to ensure compliance with relevant permit conditions no later than 2nd March 2018.

We will review your improvements in a site audit planned for the 8th and 9th March 2018.

F1 : Amenity Odour

Strong landfill gas odour was detected outside the site coupled with the fact that these odours were substantiated on-site, as we recorded significant gas emissions coming from point sources on site which are explained above.

As a result of the above a **CCS breach of 2** has been noted under condition 3.3.1 as the activities are not free from odour and are at levels likely to cause significant pollution outside the site. Appropriate measures including, but not limited to, those specified in an approved odour management plan have not been carried out.

E3: Emission to Water

Surface water discharge

The cause of the discoloration of the Nant y Bradnant noticed during our perimeter inspection was concluded to be from the surface water treatment lagoons in the eastern corner of the site. A formal sample was taken of the discharge from the third lagoon (P1). Permit condition 3.1.2 stipulates that the limits given in Table S3.2 shall not be exceeded.

A suspended solids concentration of 178mg/l was detected exceeding the limit stipulated in the permit of 50 mg/l by three times, and an ammonical Nitrogen concentration of 0.5 mg/l was detected, twice the stipulated limit in the permit.

Leachate discharge

Due to the fact that there was an unauthorised discharge from the leachate storage lagoon to surface water a breach of condition under 3.1.1 has also been noted.

As a result a **CCS score of 2** is applied under condition 3.1.2 and 3.1.1 (Consolidated).

ACTION 6. Operator to confirm what actions and measures are taken to improve surface water quality from P1 to avoid future breaches of limit values stipulated in permit.

E2: Emission to Ground

There appears to have been a recent failure at the DAF plant attached to the leachate treatment plant. There was evidence of a

loss of sludge to ground and to the ditch at the rear of this plant. This failure needs to be investigated and remediated as soon as possible.

There was also a substantial amount of litter blown from the operational cell, mainly down to lack of daily cover on site. This was raised by Natural Resources Wales on the 23rd January 2018 and was still an issue on site today.

Due to the above failure with the DAF plant and subsequent discharge to ground and the issues with litter, a breach of permit condition 3.2.1. A **CCS score of 3** has been applied on this occasion.

G4 : Reporting and notification.

The operator failed to inform Natural Resources Wales of the breach of permit and of activities that give rise to an incident or accident which significantly affects or may significantly affect the environment which are highlighted in this CAR form.

The operator also failed to take the measures necessary to limit the environmental consequence of such an incident or accident, and take the measures necessary to ensure compliance is restored within the shortest time,

examples include :

- Gas management and inadequate gas collection for prevention of gas and odour emissions. (Issues that was drawn to the attention of the operator in 2017)
- Management of leachate within leachate storage lagoon. (Storage lagoon was witnessed to be still causing environmental issues the following day when Natural Resources Wales attended. During Environment Officer time on site no tankering was witnessed.
- Emission to ground from DAF plant and litter issues
- Suspended solids pollution of the Afon Bradnant (Photographs confirm that suspended solids were still high in the surface water drain deriving from P1).

Condition 4.3.1 of the permit stipulates :

a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately-

- i) Inform Natural Resources Wales, and
- ii) Take the measures necessary to limit the environmental consequence of such an incident or accident,
- iii) Take the measures necessary to prevent further possible incidents or accidents

b) in the event of a breach of any permit condition the operator must immediately –

- i) Inform Natural Resources Wales
- ii) Take the measures necessary to ensure that compliance is restored within the shortest time

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

ACTION 7. Operator to review current reporting procedures and notification within the EMS and forward a copy to Natural Resources Wales no later than 16th March 2018.

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 grave 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 on several aspects of the permit requirements and a failure to follow relevant procedures resulting in several breaches of permit conditions which have led to pollution of the environment:

- Gas management and inadequate gas collection for prevention of gas and odour emissions. (Issues that was drawn to the attention of the operator in 2017)
- Management of leachate within leachate storage lagoon.
- Recent emission to ground due to failure with DAF plant and failure to clear litter blown material deriving from the operational cell due to lack of cover.
- Suspended solids pollution of the Afon Bradnant
- Failure to notify Natural Resources Wales.
- Failure to take measures necessary to limit the environmental consequence of incidents and take measures necessary to prevent further possible incidents or accidents

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

ACTION 8.

Please note that the notice of partial suspension and requirement to take steps Regulation 37(1) and (5) was issued on the 18th January 2018. As part of the steps to be taken under this notice was to display appropriate signage at the site entrance and adjacent to the weighbridge, notifying the public that no further waste of any kind can be accepted for disposal in the landfill.

Please supply a copy of this notice and evidence that the notices are in situ to NRW no later than **26th February 2018**.

Please note 'due dates' noted under section 4 are 20/02/2018 - please read as immediately

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0032922**

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	30/01/2018

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			
E3	C2	See txt in CAR form	20/02/2018
F1	C2	Use appropriate measures to reduce and minimise the emission of landfill gas and other sources of odour on site - See text in CAR form for further information	20/02/2018
B1	C2	Investigate and address all areas of high ambient and point source gas emissions identified in this report. (See text in CAR form for further information)	20/02/2018
C1	C2	see text in CAR form	20/02/2018
B4	C2	Bring leachate levels within lagoon down immediately and see text in CAR form	20/02/2018
E2	C3	See text in CAR form	20/02/2018
G4	C2	see text in CAR form	20/02/2018

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.