

This form will report compliance with your permit as determined by an NRW officer

Site	Ffridd Rasmus Landfill Areas 1 and 3	Permit Ref	GP3330BY		
Operator/ Permit holder	Gwynedd Council				
Date	23/04/2014	Time in	13:00	Out	15:00
What parts of the permit were assessed	Landfill Gas Control				
Assessment	Audit	EPR Activity:	Installation	X	Waste Op
Recipient's name/position	Steven Edwards				
Officer's name	Stuart Ross, Aled Zachary	Date issued	02/05/2014		

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). 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

Condition(s) breached

Permit Conditions and Compliance Summary	Condition(s) breached
a) Permitted activities	1. Specified by permit N
b) Infrastructure	1. Engineering for prevention & control of pollution A
	2. Closure & decommissioning N
	3. Site drainage engineering (clean & foul) N
	4. Containment of stored materials N
	5. Plant and equipment A
c) General management	1. Staff competency/ training N
	2. Management system & operating procedures N
	3. Materials acceptance N
	4. Storage handling, labelling, segregation N
d) Incident management	1. Site security N
	2. Accident, emergency & incident planning N
e) Emissions	1. Air A
	2. Land & Groundwater N
	3. Surface water N
	4. Sewer N
	5. Waste N
f) Amenity	1. Odour N
	2. Noise N
	3. Dust/fibres/particulates N
	4. Pests, birds & scavengers N
	5. Deposits on road N
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment N
	2. Records of activity, site diary, journal & events N
	3. Maintenance records N
	4. Reporting & notification N
h) Resource efficiency	1. Efficient use of raw materials N
	2. Energy N

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),
A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response

OK FOR PUBLIC REGISTER
5/6/14
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JB EDM

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 (e.g. 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) Order 2012.

Please refer to the Fridd Rasmus Methane Emissions Survey Report dated 23/04/14 for audit findings, actions and recommendations.

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Operator/ Permit	Gwynedd Council	Date	23/04/2014

Section 3- Enforcement Response **Only one of the boxes below should be ticked**

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.

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			

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 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 which 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 fulfill 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 (e.g. 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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information 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 twenty 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 the officer's line managers. 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.



Methane Emissions Survey Sheet

Site	Ffridd Rasmus Landfill (Area 3)	Date	23/04/14	Time	in: 13:00
					out: 15:00
Instrument	Gazomat Inspectra TDL (Serial No.: 1470311)	Test gas reading	N/A	Time	N/A
Next Calibration due	2015	Background reading	2.4ppm	Time	09:45
Weather conditions:	Overcast , light/moderate persistent rain, light breeze			Atm. Press.	
Survey Undertaken by:	S.Ross / A. Zachary				

General comments / observations

This technical review is being carried out as a key part of Natural Resources Wales Strategy to reduce methane emissions from landfill sites in England and Wales. The objectives of the site review include ensuring that the site is being operated and maintained so as to maximise gas collection efficiency and minimise fugitive landfill gas emissions. Treating the gas in a manner that minimises point source emissions.

An ATEX certified, Gazomat Inspectra Laser Methane Analyser was used to perform emissions testing at the site. Surface capping and structures (all landfill gas & leachate extraction wells) on the site were tested in order to establish potential sources of methane egress. Due to adverse weather records were not made of every well observation – if gas wells are not referenced below this indicates that it is highly likely there is no issue. Photos were taken of any point of interest.

NB: For the purposes of the table below 1000ppm is the equivalent to 0.1% ambient methane.

Point ref.	Methane Reading	Feature and / or Grid Reference	Description / Comment	Key
1	0 ppm	GW56	No issues noted. 10ppm briefly detected near well but possible from a different source as slight odour noted on wind travelling towards our position.	0 - 50ppm
2	1500 ppm	LC4B leachate collection well	Small localised emission detected from pin on well head. Requires repair.	50 - 100ppm
3	1500 ppm?	GW54	Emission detected at well ground seal. Later identified that emission from knock out pot ground seal upwind of GW54 was likely fugitive source. No issues noted with gas well. No apparent flow.	101 - 500ppm
4	500 ppm	GW44	Fugitive emission noted at well ground seal. No apparent flow. Rebalance well and check bentonite seal.	501 - 1000ppm
5	0 ppm	GW43	No issues noted. No apparent flow.	1001 - 5000ppm
6	200 ppm	GW23	Slight emission at ground seal. No apparent flow. Check bentonite seal	5001 - 10000ppm
7	0 ppm	GW42	No issues noted. No apparent flow.	>1% v/v
8	0 ppm	GW45	No issues noted. No apparent flow.	



9	0 ppm	GW52	No issues noted. No apparent flow
10	0 ppm	GW57	No issues noted. No apparent flow.
11	20% v/v	KOP Cell 4A west	Emissions detected from knock out pot ground seal. Requires attention.

Ffridd Rasmus (Area 2) Landfill Site

**Surface Emissions Survey
23/04/2014**

Findings/Recommendations

Findings

- A small number of relatively minor defects were identified as detailed in the table above. No fugitive emissions were detected from the vast majority of gas and leachate collection wells (not all wells assessed are listed in the table above).
- The vast majority landfill gas and leachate collection wells were in good condition and no significant defects were found.
- During the cap walkover no fugitive emissions were detected from the capped surface whatsoever.
- The ring main and condensate knock out pots were in good condition with good falls and no issues were noted.
- Generally gas well connecting pipe work had adequate falls. No condensate traps were noted at any wells. Some wells on the 'plateau' have very gentle falls and will require ongoing attention as the waste mass settles. Some falls have been maintained using tyres to prop up pipe work.
- No pneumatic / electric pumps were installed in any gas wells for de-watering purposes.
- Extraction volume recorded as 373m³ / hr at the gas compound. The flare was operational. Extraction volumes have increased significantly since cell 4 A/B was capped in March/April 2014.

In summary the landfill gas collection infrastructure was found to be in good condition with fugitive LFG emissions absent from almost all of the features assessed. Based on the results of the survey and the observations made, it is concluded the landfill gas is being controlled to a high standard.

We welcome the current gas engine feasibility study. Please contact me should you require pre-application discussions / support as required.

Actions

- Repair pin hole defect on LC4B leachate collection well and re-seal the KOP ground seal to prevent fugitive emissions. Please confirm actions have been completed by 09/05/14.
- Please provide the most recent gas well dip data to NRW by 16/05/14, along with an assessment as to how many wells would benefit from dewatering.
- GW44 and GW23 – check bentonite seals and re-seal / hydrate as required. Please do so by 09/05/14.



Recommendation(s)

- Connect LC4B leachate collection well to gas extraction system

Audit Limitations

- Please note that no landfill gas quality / balancing data were assessed as part of this audit.

