

Compliance Assessment Report

Report ID:
CAR_NRW0027079

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

Site	Giants Grave Landfill	Permit Ref	SP3298FT		
Operator/Permit holder	Neath Waste Management Co Ltd				
Regime	Waste Operations				
Date of assessment	02/02/2017 - 07/02/2017	Time in	N/A	Out	N/A
Assessment type	Report/Data Review				
Parts of the permit assessed	2.4.1				
Lead officer's name	Thomas, Ffion				
Accompanied by					
Recipient's name/position	Michael Jones/ Waste manager	Date issued	07/02/2017		

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	A	
G4 - Infrastructure - Reporting and notification to Natural Resources Wales	A	

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	0	Total compliance score (see section 5 for scoring scheme)	0
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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

This Compliance Assessment Report (CAR) was completed following review of the Giants Grave landfill site, Hydrogeological Risk Assessment Review. The report titled "Giants Grave Landfill site, Hydrogeological Risk Assessment (HRA) Review. Terra Consult Limited Report Number 2570-R01 July 2016" was received by NRW via post and an electronic copy followed sent via email received on the 2 November 2016. This was in compliance with condition 2.4.1 and table S1.3 improvement programme of the permit SP3892FT

This email submission included the following summary:

As a result of the HRA Review, TerraConsult recommend a simplified monitoring schedule based on risk for Giants Grave. It is therefore proposed, in accordance with the provision within our Permit to "agree in writing", to adopt the monitoring schedule set out in the HRA.

In particular:

Leachate monitoring in Table 3.2 of the Permit to be superseded with the requirements of Table 16 of the HRA Review

Leachate monitoring in Table 3.3 of the Permit to be superseded with the requirements of Table 17 of the HRA Review

Groundwater monitoring in Table 3.4 and Table 3.5 of the Permit to be superseded with the requirements of Table 18 of the HRA Review

The HRA report was shared with NRW's Geoscience team for comment. Below I include the comments made by Kay Roberts, Technical officer (Groundwater) of the Geoscience team:

Information received:

1. Giants Grave Landfill Sites, Hydrogeological Risk Assessment Review. TerraConsult Limited, Report number 2570-R01, July 2016.

The Geoscience Team have reviewed the above HRA report submitted by the operator of Giant Grave Landfill. The permit has been issued for two areas of filling. The western area adjacent to the river (River Neath) has not been developed as a landfill and the eastern area ceased accepting waste in 2003 and is now fully capped. The HRA covers the whole permitted area. In general, the HRA is acceptable (bar a few typos), but there are a few areas of clarification that are needed before being fully accepted the HRA. The comments follow the report format.

Section 2.1 discusses the trammel drain and other drains around the site. **A map showing clearly all the drains labelled would be useful** in understanding the passive leachate drainage network on site.

Section 2.2 discusses the leachate head levels above the base of landfill, but it does not state the depth of the waste mass and whether these leachate wells are at the base of the waste mass or at some distance above it. (More comments on this later in the response which this comments relates to.) **A clear understanding (in table form) of the leachate wells depth and distance to the waste mass base would be helpful** when requesting changes to the leachate head levels in section 8 of the HRA.

Table 4 compares the currently leachate composition with the previous 2010 HRA results and indicated a decline and stabilising leachate composition. This would be expected given the age and capping details of the site.

Table 5 identified elevated ammoniacal nitrogen in BH45B and a potential leak in the eastern drain. Section 4.2 (on page 21) goes on to suggest a leachate “break out” at BH43B (there may be a typographical error of BH43B and BH45B mixed up in text?, though it is understood these boreholes are adjacent to one another, possibler need for confirmation) This break out slug is now depleting, but BH43B is still elevated with approximately 60 mg/l of ammoniacal nitrogen.

Groundwater levels in BH45B indicate a possible groundwater mound or a leak in the canal

lining. The integrity of the canal lining adjacent to the landfill should be investigated and any leaks observed should be repaired (may not be possible as it will need the permission of the Canals and River Trust). The canal water levels are indicated to be above the groundwater level below the landfill. This may also be the cause of the leachate “break out” observed in BH43B.

Based on the two comments above about elevated ammoniacal nitrogen and potential leak from the canal – further investigation along this eastern boundary of the site is recommend to determine the source of the ammoniacal nitrogen and leak.

There is a data gap between January 2010 and December 2011 – two years of missing data in water quality sampling – why is this data missing?

There are no changes to the modelling undertake during the 2010 HRA as the site operation have not changed in the last 6 years – we accept this.

Proposed changes to Requisite Surveillance (Section 8)

Section 8.2 defines the leachate collection network at the site as passive (i.e. no pumping). Steady state conditions appear to have been reached with the leachate head levels. The operator propose to change the leachate head levels from metres above landfill base to metres above Ordnance Datum (mAOD). **It would be helpful to have the two measurements together in a table to allow comparison of current leachate head levels and future levels (table 16).**

In tables 17 and 18, the operator propose changing the frequency of monitoring of leachate and groundwater (tables 12 and 14 have the current schedules). There are no suggestions to change the permit limits for determinants only the frequency with some minor changes to monitoring locations and inclusion and exclusion of some WQ parameters. **We advise that monitoring frequency and locations should be suitable and sufficient to support a permit surrender application in the future.**

South West Wales Waste Regulation Team comments further to the above: With regards to the request to change the frequency of monitoring the operator is advised to review of the landfill permit surrender requirements so as to ensure understanding. The moving from monthly to quarterly and quarterly to 6 monthly monitoring may still provide sufficient data for the purposes of surrender. The change from annually to suggested 4 yearly I suggest would leave the site at risk of insufficient data for the purposes of future surrender of the permit, however 2 yearly may be acceptable.

A recommendation to include contingency plans for any monitoring spikes or raising trends of parameters permit limits observed could see frequency changed accordingly back to a monthly/annual schedule until limits are seen to return to the previous norm. This approach may provide a sufficient data sets to undertake an investigation and make an assessment conclusion, which would support future monitoring annual reviews/HRA reviews/surrender.

Pending the agreement to and submission of contingency plans for any spikes or raising trends, NRW agrees to the change of monitoring frequency of monthly to quarterly, quarterly to 6 monthly and annually to 2 yearly. However the operator must understand the possible risks such a change in monitoring frequency may cause when seeking surrender of the permit if a data set is limited.

Summary of information required

Below is a summary of the information required before NRW are able to accept the HRA. Please provide this information by 31 May 2017 (or otherwise agreed date)

1. Map of trammel drain and other drains around the site.
2. Table of leachate well depths and depth to waste mass below base of well.
3. Investigation along Eastern boundary for potential leak in canal and source of ammoniacal nitrogen – this can be done over the next HRA cycle of 6 years.
4. Missing data from January 2010 to December 2011.
5. Table of leachate heads and mAOD (can link with table in point 2 above).
6. Contingency plans for monitoring frequency scheduling.

END

EPR Compliance Assessment Report

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Operator/Permit holder	Neath Waste Management Co Ltd	Date	02/02/2017

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.

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			

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.