

Compliance Assessment Report CAR_NRW0043043

Permit number	MP3330WP	Operator name	Resources Management U.K Limited
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Site name	Withyhedge Landfill
Site address	Withyhedge Landfill Bowlings House , Rudbaxton, Haverfordwest, Pembrokeshire, SA62 4DB.
Type of assessment	Site Inspection

Date of assessment	07/12/2023	Time in	09:00	Time out	15:00
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Parts of permit assessed	Site Inspection
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NRW Lead officer	Rhodri Morgan	Accompanied by	Elliot Jones
Report sent to – Name and position	Phil Ridley – Business & Development Director	Date	22/12/2023

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (use action criteria below)	Assessment result	Permit condition
IR3C - Emission and Monitoring - Odour	C2 Significant	3.3.1
IR2K - Operations - Landfill gas management (only applicable to Landfill)	C2 Significant	2.10.1, 2.10.2
IR2C - Operations - Operating techniques	C2 Significant	2.3.1, 1.1.1

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
3	93

2. What action is required?

Compliance Criteria	Action needed	Complete by
IR3C	Ensure appropriate measures are utilised to collect, control and treat landfill gas.	Ongoing
IR2K	Ensure the unsealed leachate sump (Cell 13) is sealed immediately.	Already Completed

Compliance Criteria	Action needed	Complete by
IR2C	Ensure that all appropriate measures are taken to prevent the emission of landfill gas from the Site	Ongoing

Action criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecutions and/or suspension or revocation of your permit.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

Resources Management (UK) Limited (RML) operates Withyhedge Landfill under the provisions of an EPR Permit (MP3330WP).

The site is a non-hazardous landfill and was constructed in two phases. Phase I operated on a dilute and disperse basis; accepting waste from 1985 until its closure in 2006. Phase II is where the current active tipping section is found on the Site.

Introduction

A site inspection of the landfill was undertaken on the 7th December 2023, following a spate of odour complaints from the surrounding community. NRW officers also inspected the recently constructed Cell 8, which is being subjected to remedial works following the identification of water beneath the flexible membrane liner (FML).

NRW were escorted around the permitted installation by Howard Evans (RML) and Ewan Thomas (Geotechnology Limited).

Site Observations

Odour Assessment

Since October 2023, NRW have received an increasing number of complaints from local residents reporting offensive odours from the Site. NRW Officers have attended on a number of occasions and have substantiated an offsite landfill gas odour on numerous occasions.

Prior to attending Site on 7 December 2023, an odour assessment was undertaken at several points within the surrounding community earlier that day; including locations within Bethlehem, Spittal and Treffgarne. The weather was overcast with intermittent rainfall and a temperature of approximately 11°C. There was a steady breeze noted; emanating from the south to south east.

To the north / northwest of the Site – which was downwind of the landfill at the time – NRW officers noted an offensive odour which was recognised as a landfill gas type odour.

The offensive landfill odour detected outside of the Site by the NRW officers is considered a breach of permit condition 3.3.1. As a result of this, a non-compliance score of C2 has been allocated against compliance sub-criteria IR3C (Odour).

The root cause of the breach has been linked with a failure to follow appropriate measures to collect and control landfill gas.

Operational Areas

On arrival the operator reported that the landfill gas engines were operating as normal, with no flaring. No issues were reported with the landfill gas collection system.

The operational areas and active tipping face (Cell 7) were inspected during the visit. During the inspection a new leachate sump associated with Cell 13 was discovered to be unsealed with no gas tight end cap installed (Figure 1). This was providing a point source pathway for gas release from the waste mass; with landfill gas odours detected in the area surrounding the sump.



Figure 1 - Unsealed Leachate Sump (Cell 13)

The operator was instructed to seal the sump immediately and they have subsequently provided evidence on 8 December 2023 that the necessary remedial works has since been completed.

The failure to ensure that the leachate sump had been provided with a gas-tight seal is contrary to permit condition 2.10.1 and 2.10.2, as the operator has failed to take appropriate measures to collect, control and treat landfill gas. As a result of this, a non-compliance score of C2 has been allocated against compliance sub-criteria IR2K (Landfill gas management).

The root cause of the failure was explored and it appears that the leachate sump has remained unsealed since the completion of construction works on Cell 13. Daily inspections of the site infrastructure – including the

integrity of the leachate collection system – are undertaken to ensure there are no uncontrolled releases of odour. The daily inspections should have identified that the leachate sump had not been sealed.

The operator's Landfill Gas Management Plan (GMP) and Odour Management Plan (OMP) details control measures that the Site utilises to reduce the likelihood of odours being detected offsite. These indicate that all monitoring and extraction points for both landfill gas and leachate will be sealed to prevent the fugitive emissions of landfill gas. The failure to seal the leachate sump conflicts with the control measures listed within the GMP and OMP.

This is in contrary of permit conditions 2.3.1 and 1.1.1, as the operator has failed to manage the operations in accordance with its management systems. As a result of this, a non-compliance score of C2 has been allocated against compliance sub-criteria IR2C - Operating techniques.

The operator must ensure that all appropriate measures are taken to prevent the emission of landfill gas from the Site. This includes ensuring that the control measures identified within the Site's OMP and GMP are followed.

Other Observations

The annual methane emission survey was completed throughout the Site on the week commencing 11 December 2023. It is understood that a number of remedial actions have been identified and completed following the survey. The results of the survey will need to be shared with NRW as soon as available.

NRW plans to complete an independent methane emissions survey in December 2023. The purpose of the survey is to assess fugitive landfill gas emissions, and visually inspect the landfill gas infrastructure.

Landfill Engineering – Cell 8 (Phase I) Construction

The next cell at the site, Cell 8, is being constructed in two phases. The initial phase (phase 1) has been completed however it is presently being subjected to remedial works following the identification of water beneath the FML (see previous CAR report - CAR_NRW0042816).

An investigation found the water to be trapped between the HDPE membrane and the underlying Geosynthetic Clay Liner (GCL). Surface water inflow through the eastern anchor trench has been identified by the operator as the most likely source of the trapped water. During construction it was noted by the operator that the eastern batter received a significant quantity of surface water run-off which they claim may have tracked beneath the liner and settled between the GCL and the HDPE membrane.

The anchor trench has been backfilled with site won material and is to be covered with a capping membrane repair which will divert water over the trench.

The investigation has considered the impact of the trapped water on the integrity of the cell's containment system. An assessment of the condition of the GCL has been undertaken with samples retrieved for laboratory analysis. This work will be the subject of an addendum to the CQA Validation Report and will include analysis of the trapped water and supplementary testing of GCL material.

No disposal of waste can take place in the new cell until the required remedial works have been completed and NRW has confirmed that it is satisfied with the remedial works.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found in the aspects assessed.
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

If your assessment result in Section 1 is suspended, what does this mean?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry compliance criteria (used in section 1 and 2):

1 - Management

- IR1A - General management
- IR1B - Finance (only applicable to Landfill)
- IR1C - Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2 - Operations

- IR2A - Permitted activities
- IR2B - The site
- IR2C - Operating techniques
- IR2D - Technical requirements
- IR2E - Improvement programme
- IR2F - Pre-operational conditions
- IR2G - Landfill engineering (only applicable to Landfill)
- IR2H - Waste acceptance (only applicable to landfill)
- IR2I - Leachate levels (only applicable to Landfill)
- IR2J - Closure and aftercare (only applicable to Landfill)
- IR2K - Landfill gas management (only applicable to Landfill)

3 - Emission and Monitoring

- IR3A - Emissions to water, air or land
- IR3B - Emissions of substances not controlled by emission limits
- IR3C - Odour
- IR3D - Noise and vibration
- IR3E - Monitoring
- IR3F - Pests
- IR3G - Air quality management plans
- IR3H - Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I - Fire

4 - Information

- IR4A - Records
- IR4B – Reporting
- IR4C - Notification

Enforcement response

Any non-compliance with a permit condition is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or 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
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within twenty working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.