

Compliance Assessment Report CAR_NRW0043109

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	19/12/2023	Time in	10:00	Time out	15:30
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Parts of permit assessed	Site Inspection
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NRW Lead officer	Rhodri Morgan	Accompanied by	Elliot Jones, Mostyn Wall, Erin Smyth-Evans.
Report sent to – Name and position	Phil Ridley – Business & Development Director	Date	01/02/2024

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 (non-compliance score for this permit breach suspended for this visit).
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,
IR1A - Management - General management	C2 Significant	1.1.1,
IR3A - Emission & Monitoring - Emissions to water, air or land	C3 Minor	3.3.1,
IR2I - Operations - Leachate levels (only applicable to Landfill)	C3 Minor	2.8.1,

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

Total number of non-compliances recorded	Total non-compliance score
6	132 (31 points suspended)

2. What action is required?

Compliance Criteria	Action needed	Complete by
IR3C, IR2K, IR2C & IR1A	Ensure all appropriate measures are implemented and maintained to effectively collect, control and treat landfill gas and prevent malodourous emissions from the site.	Immediate
IR3A	Operator instructed to take immediate steps to stop the discharge.	Action completed
	Implement appropriate control measures to ensure no further unauthorised discharges from the site.	Immediate and ongoing
IR2I	Operator was instructed to reduce leachate levels within the cell to levels below the permit limits.	Action should now be completed
IR2I	The Operator to provide findings or update into their investigation of an alleged leachate pollution from the Site (WIRS 2309695).	Within 1 week from the issue of this report
IR2I	Ensure appropriate control measures are utilised to prevent leachate from leaving the confines of Cell 6.	Immediate and 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 accepted waste from 1985 until its closure in 2006. Phase II is where the current active tipping area is found at the Site.

Introduction

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

A Site inspection of the landfill was undertaken on the 19th December 2023. The purpose of the inspection was to assess fugitive landfill gas emissions and visually inspect elements of the Site's landfill gas collection and control infrastructure.

NRW were escorted around the permitted installation by representatives of RML and their consultants (Howard Evans, Phil Ridley (RML) and Ben Rees (Geotechnology Limited)). Representatives from Pembrokeshire County Council's Public Protection and Planning departments were also in attendance.

Site Observations

Odour Assessment

Prior to attending Site on the 19th December 2023, an odour assessment was undertaken by NRW officers at several points within the surrounding community; including locations within Rudbaxton, Poyston and Crundale. To the south of the landfill Site – which was downwind of the landfill at the time – NRW officers noted an offensive odour which was recognised as a landfill gas odour. The officers were satisfied that the offensive odour they detected would constitute an odour pollution.

The offensive landfill odour detected outside of the Site by the NRW officers is considered an odour pollution and a breach of permit condition 3.3.1.

Operational Areas

On arrival the operator reported that the landfill gas engines were operating as normal. No gas was being flared. No issues were reported with the landfill gas collection system.

The operational areas and active tipping face were inspected during the visit. The active tipping area covered an extensive area; with large sections of uncovered waste visible (i.e., no daily cover or intermediate cover). A second smaller working area was also visible on the southern flank of Cell 7.

The operator explained that the breakdown of one of the Sites compactors had delayed the application of daily cover to the working area. NRW were advised that a suitable layer of daily cover would be applied prior to the end of the working day.

The failure to apply appropriate daily cover over large areas of the tipping face with alternative plant and the continuation of waste emplacement operations without a waste compactor is considered contrary to permit conditions 2.3.1 and 1.1.1.

The operator was in the process of applying an intermediate cover to the uncapped sections of the landfill. They stated that this would be completed by the 22 December 2023; ahead of the Christmas shut down period.

Landfill Gas check

A landfill gas check of methane emissions was undertaken by NRW officers at various locations across the uncapped areas of the landfill using a Gazomat methane detector.

In areas of exposed waste – in the active tipping area of Cell 1/2 South and Cell 3 South – the levels of methane recorded was between 50ppm and 1300ppm. At a recently installed gas well (400/25), methane was recorded at 8000ppm, where gas was escaping between the well casing and the waste mass. This was due to a lack of a bentonite seal surrounding the well casing allowing landfill gas to escape along the outer edge of the well.

Across Cell 6 and Cell 7, methane levels were recorded up to 7500ppm. A methane figure of 2200ppm was recorded around the leachate well in Cell 6. The leachate well had no visible bentonite seal around the concrete casing, allowing landfill gas to migrate from the waste mass.

The absence or deficiency of an effective bentonite seal around the leachate well and gas well resulted in the uncontrolled point source release of landfill gas and is contrary to condition 2.10.1.

Elevated methane emissions were also detected along the stone drainage blanket along the toe of the 7 flank. No measures to reduce or collect gas were present.

Gas Wells

There was limited gas extraction within Cell 1/2 South and Cell 3 South and no gas extraction wells within Cell 6 and Cell 7 (other than gas extraction at the two leachate extraction wells). Some landfill gas wells could have been installed along the flanks of the operational area (Cell 6 and Cell 7) by this stage.

The limited number of gas wells in cells has resulted in significant volumes of landfill gas not being collected as required by the permit 2.10.1.

Waste Cover

Numerous deficiencies in the intermediate cover layer, covering the flanks on cells 6 and 7 were observed, including:

- large areas of the cover layer comprised of porous and non-cohesive materials that were unsuitable as an intermediate cover layer;
- in some areas, the operator had failed to maintain the intermediate cover layer that had been installed with evidence of wash-out and erosion, resulting in areas without an intermediate cover layer.

The permeability of the non-cohesive material used by the operator as an intermediate cover material and placed over the waste does not provide a sufficient seal to reduce landfill gas emissions. The gas check with the Gazomat methane analyser confirmed that significant volumes of methane was being emitted from large areas of Cells 6 and 7.

NRW considers that the operator has failed to take appropriate measures to collect landfill gas, due to inadequate temporary capping of each cell and the effective absence of gas extraction over large areas of the cells.

Odour and landfill gas compliance summary

- The offensive landfill odour detected outside of the Site boundary by NRW officers on the 19th December 2023 is considered an odour pollution and 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.

Note: This breach is now considered an ongoing odour non-compliance. However in accordance with NRW's non-compliance scoring guidelines, ongoing breaches of the odour permit condition will only be attributed a non-compliance score a maximum of once per calendar month. So whilst an odour breach has been identified and recorded during the December 17th visit, a second non-compliance score (C2) has been consolidated with the earlier non-compliance score – which was listed on the CAR report for the 7th December visit (CAR_NRW0043043).

- The failures and/or deficiencies in the following appropriate measures (to control odours and landfill gas) were identified and contributed to the uncontrolled release of landfill gas, which contributed to the malodorous emission from the Site:
 - failure to provide and/or maintain an appropriate bentonite seal around landfill and leachate infrastructure;
 - failure to apply and/or maintain a suitable layer of intermediate cover along the non-operational areas (including the flanks of the landfill);
 - delay in the phased installation of gas extraction system and an engineered capping system;
 - delays in installing landfill gas extraction wells particularly along completed flanks of Cells 6 and 7 (including systems to collect gas from leachate drainage blanket);
 - continuation of waste operations whilst critical heavy plant (compactor plant) was not available to apply suitable cover layer;
 - failure to use alternative plant to apply suitable cover.

The failure to take appropriate measures to collect, control and treat landfill gas is also contrary to permit condition 2.10.1 and 2.10.2. As a result of this, a non-compliance score of C2 has been allocated against compliance sub-criteria IR2K - Landfill Gas Management.

Furthermore several of the above noted failures/deficiencies are also considered contrary to condition 2.3.1 and condition 1.1.1. As a result of this, non-compliance scores of C2 have been allocated against compliance sub-criteria IR2C - Operating techniques and IR1A - General management.

Surface Water Management

During the Site visit an unauthorised (surface water) discharge contaminated with suspended solids, was noted along the north-eastern corner of the Site (NGR SM 96333 21703).

Surface water in this area is managed via a pumping system which discharges into a series of surface water ponds, connected to the Site's permitted discharge point (D1). The operator was instructed to stop the discharge immediately and implement appropriate control measures to ensure further discharges are prevented.

The discharge of contaminated surface water at an unauthorised emission point is considered a breach of condition 3.1.1. A non-compliance score of C3 has been allocated to this breach.

Leachate Management

An area of leachate breakout was noted along the western flank of Cell 6 during the Site inspection. The leachate was observed on the surface of the landfill cap before flowing back into the confines of the cell.

Leachate level checks were conducted at several random leachate monitoring wells. The leachate level within L2 was recoded at 2.19m; exceeding the 1m limit specified within the permit.

The breach of the leachate level limit is contrary to permit condition 2.8.1 As a result of this, a non-compliance score of C3 has been allocated against compliance sub-criteria IR2I - Leachate levels.

The Operator is currently investigating an alleged leachate pollution from the Site linked to a specific event that was filmed and posted online and later shared with the operator for investigation (WIRS 2309695).

Regulation 36 Statutory Notice

In response to some of the deficiencies identified in this visit a Regulation 36 Statutory Notice was issued to the operator on the 21st December 2023. The notice required a number of actions to be undertaken, primarily to improve and apply a suitable intermediate cover before the Christmas shutdown period.

The operator confirmed on the 23rd December 2024 that the requirements of this notice had been satisfied.

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.