

Compliance Assessment Report CAR_NRW0051499

Permit being assessed: BP3494FC.

For: Gardden Claypit 1 Midlands, **held by:** WRG (Midlands) Ltd

At: Gardden, Ruabon, Wrexham, Clwyd, LL14 6RF.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 31/03/2026.

Parts of permit assessed: Monitoring.

NRW Lead Officer: Sarah Walton.

Report sent to: Chris Bennion , Site Business Manager, on 22/04/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
W3A(2) - Waste - Emissions and monitoring - Emissions to air	C4 No impact	3.1.6
W3A(2) - Waste - Emissions and monitoring - Emissions to air	Action only (X)	
W2C - Waste - Operations - Operating techniques	Action only (X)	
W2C - Waste - Operations - Operating techniques	Action only (X)	
W3A(1) - Waste - Emissions and monitoring - Emissions to water	C3 Minor	3.5.1

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

Total non-compliances recorded	Total non-compliance score
2	4.1

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
W3A(2)	.Investigate elevated Carbon Dioxide levels and take action to	08/06/2026

Criteria	Action needed	Complete by
	bring levels back within permit limits.	
W3A(2)	Please investigate & check gas well infrastructure where Landfill Gas Balance exceeds 20% and O2 exceeds 5%. Report back to NRW with findings and any action taken.	08/06/2026
W2C	Aim to keep the groundwater sump water level at the optimum level of 5.5mbgl or below.	18/05/2026
W2C	Please respond to this report, explaining how the pump from the groundwater sump works. For example is this managed remotely, is it automatic or is it manually turned on and off. When is the pump in operation, is there a procedure and is there a target groundwater level.	06/05/2026
W3A(1)	Investigate the source of elevated Ammoniacal Nitrogen at WMP4A. It is suggested that the integrity of the leachate tanks & bunds are inspected to ensure that there are no leaks/pathways to surface or groundwater. Report back to NRW with findings and any action taken.	18/05/2026

Compliance 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 prosecution and/or suspension or revocation of your permit.

At this time, we do not intend to take any further action.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

A review of monitoring data for quarter 4 2025 has been completed (October - December 2025).

Permit condition 3.5.1 *"The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit: (a) Leachate specified in tables S3.1 and S3.7; (b) Point source emissions specified in tables S3.2, S3.3 and S3.4; (c) Groundwater specified in tables S3.9; (d) Landfill gas specified in tables S3.5 and S3.6; and (e) Surface water specified in table S3.8".*

Leachate

Monitoring 24/10/2025

Leachate monitoring point RUAMW003R (GWM3) recorded a level of 114.21(mAOD). This is close to the permit limit of 114.25.

Monitoring 21/11/2025

Leachate monitoring point RUAMW003R (GWM3) recorded a level of 114.22(mAOD). This is close to the permit limit of 114.25.

Leachate monitoring point RULMP2r (LMP2r) recorded a water level of 113.43(mAOD). This is close to the permit limit of 114.

Monitoring 12/12/2025

Leachate monitoring point RUAMW003R (GWM3) recorded a level of 114.19(mAOD). This is close to the permit limit of 114.25.

Leachate monitoring point RULMP2r (LMP2r) recorded a water level of 113.60(mAOD). This is close to the permit limit of 114.

No breaches of permit limits were identified for leachate levels across quarter 4. However, please pay close attention to GWM3 and LMP2r that are recording levels close to permit limits.

Landfill gas in external monitoring boreholes

Permit condition 3.1.6 *"The limits for landfill gas arising from the facility set out in schedule 3, table S3.5 shall not be exceeded"*.

Breaches of Carbon Dioxide limits in external monitoring boreholes:

RUBH002A (BH2A) with limit of 1.5 (%v/v):

06/10/2025: **5.6(%v/v)**

13/10/2025: **4.8(%v/v)**

05/11/2025: **5.4(%v/v)**

14/11/2025: **4.9(%v/v)**

27/11/2025: **2.9(%v/v)**

05/12/2025: **2.7(%v/v)**

19/12/2025: **3(%v/v)**

22/12/2025: **1.9(%v/v)**

BH3B with limit of 1.5(%v/v):

14/11/2025: **1.6(%v/v)**

BH6 with a limit of 1.5(%v/v):

24/10/2025: **1.7(%v/v)**

13/10/2025: **3.1(%v/v)**

05/11/2025: **1.6(%v/v)**

GBH3 with a limit of 1.5(%v/v):

24/10/2025: **3.5(%v/v)**
29/10/2025: **2.3(%v/v)**
05/11/2025: **3.1(%v/v)**
14/11/2025: **5(%v/v)**
21/11/2025: **2.9(%v/v)**
05/12/2025: **3.2(%v/v)**
12/12/2025: **6.2(%v/v)**
19/12/2025: **4.3(%v/v)**
22/12/2025: **5.9(%v/v)**

RUGBH004 (GBH4) with a limit of 1.5(%v/v):

06/10/2025: **4.6(%v/v)**
13/10/2025: **2.5(%v/v)**
24/10/2025: **1.7(%v/v)**

RUGBH005 (GBH5) with a limit of 1.5(%v/v):

13/10/2025: **3(%v/v)**
24/10/2025: **2.4(%v/v)**
05/11/2025: **7.9(%v/v)**
14/11/2025: **5.4(%v/v)**
21/11/2025: **4.1(%v/v)**
27/11/2025: **2.3(%v/v)**
05/12/2025: **3.2(%v/v)**
19/12/2025: **3.6(%v/v)**
22/12/2025: **3.9(%v/v)**

RUBH0007 (BH7) with a limit of 1.4(%v/v):

24/10/2025: **1.9(%v/v)**
29/10/2025: **2.7(%v/v)**
05/11/2025: **1.9(%v/v)**
14/11/2025: **3.9(%v/v)**
21/11/2025: **6 (%v/v)**
27/11/2025: **5.9(%v/v)**
12/12/2025: **2.7(%v/v)**
22/12/2025: **2.9(%v/v)**

RUBH0008 (BH8) with a permit limit of 1.8(%v/v)

14/11/2025: **2.5 (%v/v)**
05/12/2025: **3.4 (%v/v)**
19/12/2025: **3.4 (%v/v)**
22/12/2025: **3.3 (%v/v)**

RUGBH002 (GBH2) with a permit limit of 1.6(%v/v):

13/10/2025: 2.3(%v/v)
24/10/2025: 4.2(%v/v)
29/10/2025: 2.1(%v/v)
05/11/2025: 2.5(%v/v)
14/11/2025: 3.9(%v/v)
05/12/2025: 2.3(%v/v)
12/12/2025: 1.9(%v/v)

RUGBH02A (GBH2A) with a permit limit of 5.1(%v/v):

24/10/2025: 5.3(%v/v)

RUGBH006(GBH6) with a permit limit of 4.2(%v/v)

03/10/2025: 4.7(%v/v)
06/10/2025: 4.3(%v/v)
13/10/2025: 4.4(%v/v)
29/10/2025: 4.7(%v/v)
14/11/2025: 4.8(%v/v)

RUBH001B (BH1B) with a permit limit of 1.5(%v/v):

24/10/2025: 1.9(%v/v)

RUBH011A (BH11A) with a permit limit of 1.5(%v/v):

27/11/2025: 2.1(%v/v)
12/12/2025: 2.9(%v/v)

RUBH012A (BH12A) with a permit limit of 1.7(%v/v):

27/11/2025: 1.8(%v/v)
12/12/2025: 2.3(%v/v)

RUGBH010 (GBH10) with a permit limit of 2.7(%v/v):

27/11/2025: 3.3(%v/v)
12/12/2025: 3(%v/v)

The above Carbon Dioxide breaches have been consolidated into one CCS C4 score.

The majority of the CO₂ breaches have arisen in boreholes located in the South East extension area. This is a sensitive area of the site for gas migration.

ACTION: Investigate elevated Carbon Dioxide levels and take action to bring levels back within permit limits.

Methane:

Monitoring on 05/12/2025, 1% methane was recorded in borehole RUGBH005. Monitoring on 22/12/2025 reported 1% methane in borehole RUGBH003. The limit for these boreholes is 1%. The boreholes are located in the sensitive South-East extension area of the site which has historically been prone to gas migration. Please ensure that the integrity and function of the boreholes are maintained and that groundwater levels are kept at an adequate level to allow gas extraction from this area of the site.

Landfill Gas Balancing data

Table S3.6 of the site permit states; *"Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% an assessment of air ingress into the system shall be undertaken. Where the concentration of carbon monoxide exceeds 100ppm then further investigation shall be undertaken"*.

Balancing data for the site shows some gas extraction wells are recording over 5% oxygen and >20% balance gas. An example is shown below for monitoring point RUAR0036:

03/11/2025:

LFG Balance (%) 66.7

O2 (%) = 13.2

Valve position on arrival: off

03/12/2025:

LFG Balance (%) 78.3

O2 (%) = 19.3

Valve position on arrival: off

It is unclear if any action was taken after November's monitoring round.

ACTION: Please investigate & check gas well infrastructure where Landfill Gas Balance exceeds 20% and O2 exceeds 5%. Report back to NRW with findings and any action taken.

Groundwater

Section 3.9 of the permit, requires sampling of Groundwater Sump identified on Environmental Monitoring Plan, Drawing No. 478M035. Parameters to be reported on include water level and base of monitoring point.

24/10/2025: 4.8m dip to water

26/11/2025: 5.6m dip to water

12/12/2025: 4.68m dip to water

Table 1.2 of the site permit 'Operating Techniques' includes the following document: "Ruabon Landfill Hydrogeological Risk Assessment (HRA), Report No 4915/R/004/4, dated February 2023. Sections: - 8. Recommendations; and - 9. Requisite Surveillance".

The HRA notes the importance of water levels in the groundwater sump:
"It is understood that through correspondence between the operator and NRW it has been established that leachate extraction to current levels of below 99mAOD at GWM10 (post Oct 2020) and water removal from the groundwater sump at a level of 5.5mbgl (sump depth of 8.46mbgl) that gas control has now been established in this area of the site".

Ground water sump levels for October and December are 1m above the optimum level.

ACTION: Aim to keep groundwater sump at the optimum level of 5.5mbgl or below.

It is understood that groundwater is pumped from the sump to the surface water lagoon adjacent. The pump was not in operation on the last site visit.

ACTION: Please respond to this report, explaining how the pump from the groundwater sump works. For example is this managed remotely, is it automatic or is it manually turned on and off. When is the pump in operation and is there a procedure and ideal groundwater level.

Surface water quality / Point source emissions

Permit condition 3.1.2 "The limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08".

WMP4a emission point has limits for suspended solids, Ammoniacal Nitrogen, Chloride, PH & oil and grease.

Sampling on 24/10/2025 shows an elevated level Ammoniacal Nitrogen of 14.5mg/l, recorded at WMP4a. The permit limit for this parameter is 1.3mg/l.

This permit breach has been assigned a CCS score C3.

The site has previously been scored for ammoniacal nitrogen breaches at WMP4a. At the time, the operator investigated this issue and attributed it to a redundant tank on site that contained an unknown liquid. Levels of Ammoniacal nitrogen fell following this action. However, the issue has returned, suggesting the source of ammoniacal nitrogen is coming from elsewhere.

On a previous inspection, it was noted that the leachate tanks were in close proximity of a drain that pumped to WMP4a. Run off from site was seen going into the drain.

ACTION: Investigate the source of elevated Ammoniacal Nitrogen at WMP4A. It is suggested that the integrity of the leachate tanks & bunds are inspected to ensure that there are no leaks/pathways to surface or groundwater. Report back to NRW with findings and any action taken.

End of comments

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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
Action only (X)	Action required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

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 Waste compliance criteria (used in section 1 and 2):**1. Management**

- W1A – General management
- W1B – Energy Efficiency (MCP/SG facilities only)
- W1C – Avoidance, recovery and disposal of wastes produced by the activities

2. Operations

- W2A – Permitted activities
- W2B – Waste recovery plan
- W2C – Operating techniques
- W2D – The site
- W2E – Waste acceptance
- W2F – Technical requirements
- W2G – Improvement programme
- W2H – Pre-operational conditions

3. Emission and Monitoring

- W3A(1) – Emissions to water
- W3A(2) – Emissions to air
- W3A(3) – Emissions to land
- W3B – Emissions of substances not controlled by emission limits
- W3C – Odour
- W3D – Noise and vibration
- W3E – Monitoring
- W3F – Pests
- W3G – Fire

4. Information

- W4A – Records
- W4B – Reporting
- W4C – 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.

Disputing the Content of this Compliance Assessment Report Form

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

Concerns Not Related to the Content of this Compliance Assessment Report Form

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** 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.