

Compliance Assessment Report CAR_NRW0050240

Permit being assessed: CP3735PB.

For: Nantycaws Landfill EPR/CP3735PB, **held by:** CWM Environmental Ltd

At: Nantycaws Landfill Site Llanddarog Road , Nantycaws, Carmarthen, Carmarthenshire, SA32 8BG.

Type of assessment: Site Inspection,

Reason: Routine.

On: 24/10/2025 between 10:00 and 15:00.

Parts of permit assessed: See Section 4.

NRW Lead Officer: Benjamin Taylor, accompanied by Mostyn Wall, Sally Wakeford.

Report sent to: SHEQ and Landfill Compliance Manager, CWM Environmental Ltd, on 23/12/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2K - Installations - Operations - Landfill gas management (only applicable to landfill)	Action only (X)	
IR1A - Installations - Management - General Management	C2 Significant	Permit condition 1.1.1.
IR1A - Installations - Management - General Management	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR2G - Installations - Operations - Landfill engineering (only applicable to landfill)	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
1	31

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
IR2K	CAR_NRW0050240.1: INFINIS/CWM Environmental Ltd is to confirm to NRW that the Landfill Gas losses noted on NYCL0005 and NYCL0013 have been remediated.	09/01/2026
IR1A	CAR_NRW0050240.2: CWM Environmental Ltd must address all breaches of the landfill cap's integrity, including the removal of vegetation (such as trees) growing through the temporary liner. Once completed, evidence is to be submitted to NRW for our records.	13/02/2026
IR1A	CAR_NRW0050240.3: CWM Environmental Ltd must commission works to cap the Landfill to a permanent standard, these works must be undertaken in accordance with CQA requirements with a CQA Validation Report submitted to NRW for review.	27/11/2026
IR1A	CAR_NRW0050240.4: Until the landfill is permanently capped to the required standard, CWM Environmental Ltd must increase the frequency of the Surface Emissions Survey from annually to every six months. This measure is intended to ensure that any fugitive releases are identified and addressed at the earliest possible stage.	30/06/2026
IR2G	CAR_NRW0050240.5: CWM Environmental Ltd must commission an investigation into the slope failure and surrounding area, using a competent person and determine whether there is risk of further soil movement. Upon completion, a detailed report must be submitted to NRW as evidence. In addition, CWM Environmental Ltd are required to review and update its Stability Risk Assessment (SRA) accordingly.	20/03/2026
IR2C	CAR_NRW0050240.6: CWM Environmental Ltd must submit a permit variation application to incorporate the necessary mechanisms for landfill restoration activities. Please note that approval is not guaranteed and will be subject to determination by NRW's Permitting Team.	30/04/2026

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.

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

Introduction

This Compliance Assessment Report (CAR) relates to a Site Inspection carried out by Natural Resources Wales (NRW) on 24th of October 2025 at the Nantycaws Phase 2 Landfill. The Site is operated by CWM Environmental Ltd under EPR/CP3735PB

Scope

The pre-arranged visit on the 24th of October comprised the second instalment of the Landfill Gas Audit, the first of which (to the Gas Compound) was initially undertaken in October 2024. The 2025 visit primarily focused on the landfill gas infrastructure (gas field) which was associated with the Phase 2 Landfill Complex. During the visit, NRW Officers also attended the soils stockpiling area following observations made on the day. This visit was also undertaken in conjunction with Site Inspection to the adjacent Phase 1 Landfill Complex, which is regulated by an alternative team under permit number EPR/ TP3298FH.

Site Observations

NRW Officers arrived at 10:00 and were met by representatives of CWM Environmental and INFINIS Energy. Following introductions, the Site Walkover component of the visit commenced at 10:20, the key observations of which are detailed below:

Subsidence



Image 1: Example of subsidence around NYCW1103.

During the visit, NRW observed minor subsidence around a number of monitoring assets. CWM

Environmental informed NRW that these areas will be reinstated and reprofiled in the future in order to facilitate routine maintenance (i.e. grass-cutting activities).

Landfill Gas Losses



Image 2: Loss of Landfill Gas from redundant cable coupling points associated with NYCL0013

To facilitate the inspection, a Gazomat Inspectra® Max Methane Gas Analyzer was utilised during the walkover in order to identify losses of Landfill Gas from the Artificial Capping Liner (ACL) and gas/leachate infrastructure associated with the Landfill Complex. The following losses were recorded during the visit:

- 13.4ppm recorded from rubber seal associated with NYCL0005.
- >2000ppm detected from inadequate sealing around redundant coupling points (from a previous pump) associated with NYCL0013.

Representatives of INFINIS whom were in attendance marked up the assets which required remediation, and provided an in-situ explanation to NRW on how they would remediate these losses of Landfill Gas (i.e. installation of blanking plugs on redundant coupling points).

Action:

INFINIS/CWM Environmental Ltd is to confirm to NRW that the Landfill Gas losses noted on NYCL0005 and NYCL0013 have been remediated.

Landfill Cap Integrity



Images 3 & 4: Examples of observed failures on the Landfill Cap

During the inspection, the landfill cap was found to be compromised in a number of locations throughout the Landfill Complex. These failures can lead to increased release of surface emissions to air from the Landfill, which is a contravention of permit condition 3.3.1. Although these failures were not found to be gassing at the time of the inspection.

Review of previous Surface Emission Surveys in conjunction with onsite observations indicate repeated failures of the Landfill Cap. This is primarily due to the increased risk of degradation of temporary capping, which has been left exposed to the elements (e.g., UV damage, impact damage, vermin). The Landfill Complex has been mothballed, with no waste deposited since 2016 which has resulted in large sections of the Landfill benefitting only from temporary capping measures.

During the visit, NRW were informed that there is no intention to reopen the landfill for waste deposition and consequently, CWM Environmental should begin seeking to transition the Landfill to Aftercare/Closure status. It is the understanding of NRW that there is the potential for restoration soils works to be undertaken in 2027 and prior to this, CWM Environmental must ensure that the Landfill is capped to a permanent standard.

A previous CAR Form (Report ID: 5949), issued on 12th of August 2015, noted that during a site inspection on 28th of July 2015, the temporary capping works had been carried out without complying with the permit's Construction Quality Assurance (CQA) requirements. This was recorded as a contravention of permit condition 2.7.4, the enforcement action for which was suspended at the time pending submission of the required CQA. The consequences of these unsupervised works were noted as discussed with the Operator at the time of the 2015 inspection. It was also highlighted in the CAR Form that no compliance or assurance testing (e.g., air pressure testing) was undertaken during the completion of the temporary capping works. The agreement reached at that time is outlined below, as extracted from CAR Form ID: 5949.

'In order to address matter we have agreed that as part of the final permanent capping works the CQA inspector will need to confirm (once the temp cap is removed) that the basal containment liner is un - damaged (or repaired if damaged).'

On the 20th of November 2015, in response to actions within the CAR Form ID: 5949, CWM Environmental Ltd submitted an addendum to the existing approved CQA plan which detailed retrospective examination of the temporary capping to ensure that the 2mm HDPE basal liner was uncompromised, this includes careful removal of the temporary capping to facilitate examination. A report summarising the works, along with all associated CQA documentation was to be submitted by the CQA Engineer. However, NRW currently holds no records confirming that these works were completed or that the CQA Engineer's report was submitted by the Operator..

In light of the above, and given the prolonged deterioration of the temporary capping liner, particularly from UV exposure and vermin, NRW cannot consider it compliant with permanent capping standards. The Operator must implement necessary improvements before any restoration works can commence.

Compliance:

The Operator has failed to ensure that the Artificial Capping Liner (ACL) associated with the landfill remains uncompromised, particularly by allowing vegetation (specifically trees/shrubs) to penetrate through the temporary capping liner. NRW considers this a contravention of permit condition 1.1.1 and therefore has allocated a non-compliance score of C2 against non-compliance criteria IR1A – General Management.

Action:

CWM Environmental Ltd must address all breaches of the landfill cap's integrity, including the removal of vegetation (such as trees) growing through the temporary liner. Once completed, evidence is to be submitted to NRW for our records.

Action:

CWM Environmental Ltd must commission works to cap the Landfill to a permanent standard, these works must be undertaken in accordance with CQA requirements with a CQA Validation Report submitted to NRW for review.

Action:

Until the landfill is permanently capped to the required standard, CWM Environmental Ltd must increase the frequency of the Surface Emissions Survey from annually to every six months. This measure is intended to ensure that any fugitive releases are identified and addressed at the earliest possible stage.

Slope Failure



Image 5: Evidence of slope failure noted on SW flank of Cell 4.

During the visit, NRW Officers observed evidence of a slope failure on the flank adjacent to the southwest corner of Cell 4. Inspection of the exposed liner between the two soil masses revealed an unspecified smooth plastic sheeting placed over the Artificial Capping Liner (ACL). NRW is currently uncertain about the extent of this plastic sheeting along the flank and whether it may have contributed to the slope failure. No odours were detected in the area, and no damage to the visible section of the ACL was noted. A review of historical records indicates a previous slope failure in the area in 2010, which resulted in catastrophic damage to the ACL. Review of previous annual topographical surveys submitted by the Operator suggest that the current failure has been present for several years.

Following the visit, an email was sent to the Operator on 29th of October 2025 requesting that a competent person undertake an investigation to determine the cause of the slope failure in this area and assess whether there is any further risk of slippage.

Action:

CWM Environmental Ltd must commission an investigation into the slope failure and surrounding area, using a competent person and determine whether there is risk of further soil movement. Upon completion, a detailed report must be submitted to NRW as evidence. In addition, CWM Environmental Ltd are required to review and update its Stability Risk Assessment (SRA) accordingly.

Material Stockpile



Images 6 & 7: View of material stockpile from Cell 6 (left) and stockpile of composting material received from adjacent permitted Site (right)

NRW Officers inspected the material stockpile which is situated within the adjacent Phase 3 area to the North of Cell 6. NRW were informed that the soils have been sourced from onsite works, including the construction of the new Materials Recycling Facility (MRF) which is scheduled for commissioning in the near future. It is proposed that this material is to be used within the restoration works for the Phase 2 Landfill.

On review of the permit (CP3735PB), it has been identified that currently there are not necessary mechanisms to allow the use of deposited uncontaminated waste for recovery purposes (in this case, restoration). CWM Environmental will need to submit a permit variation application to incorporate the required provisions into their EPR permit, subject to determination and approval by NRW's Permitting Team.

Action:

CWM Environmental Ltd must submit a permit variation application to incorporate the necessary mechanisms for landfill restoration activities. Please note that approval is not guaranteed and will be subject to determination by NRW's Permitting Team.

During the visit, NRW officers observed a significant accumulation of material resembling compost within the soil stockpile area. Compliance implications have not yet been assessed, as further investigation is currently underway. This matter may be subject to future inspections and subsequent CAR Forms.



Image 8: Visually poor surface water situated adjacent to the accumulations of compost material

NRW Officers observed a body of visually contaminated surface water adjacent to the compost stockpiles and considered that surface water management in this area may be inadequate. At the time of inspection, NRW were unable to confirm the discharge point for this water, and further investigation was required.

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 only relating to the activity assessment
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 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 to 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.