

Compliance Assessment Report CAR_NRW0046182

Permit being assessed: AG0011001

For: PENDOYLAN STW, held by DWR CYMRU CYFYNGEDIG

At: PENDOYLAN STW, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN.

Type of assessment carried out: Site Inspection, Reason: Routine.

On 09/01/2025, between 12:40 and 13:00.

Parts of permit assessed: Relevant conditions

NRW Lead Officer: Charlotte Rhodes, accompanied by: Harry Warburton.

Report sent to: DCWW CARS Mailbox, DCWW CARS Mailbox, on 10/02/2025.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-B1 - Water Quality - Operations - Permitted activities	C3 Minor	1
WQ-B2 - Water Quality - Operations - The site	Action only (X)	
WQ-B2 - Water Quality - Operations - The site	Action only (X)	
WQ-A1 - Water Quality - Management - General management	Action only (X)	

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

2. What action is required?

Criteria	Action needed	Complete by
WQ-B1	Conduct further, more detailed investigations into the poor performance of the works and provide the results of the findings, any explanation and a time frame for the resolution of issues identified.	13/03/2025
WQ-B2	Address the seepage coming from the filter beds to ensure all effluent is remaining within the treatment process. Also, level out the gravel in the other filter bed and consider some general maintenance.	28/02/2025
WQ-B2	Investigate the effectiveness of the current reed bed and provide a plan to remediate.	28/02/2025
WQ-A1	Detail the maintenance plans for this site and what refurbishments have been done since the last inspection in 2022, or any planned in upcoming investment schemes.	28/02/2025

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 prosecution and/or suspension or revocation of your permit.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

Introduction

On Thursday 9th January 2025, Officers C RHODES and H WARBURTON visited Pendoylan Sewage Treatment Works for a scheduled compliance inspection of permit **AG0011001**. Officers wish to thank the Process Science Technician and Area Supervisor from Dŵr Cymru Welsh Water (DCWW) for meeting and showing them around site. The weather was dry but very cold, with rain and some snow preceding and icy conditions in general.

Permit background

The permitted discharge limits for this site are shown below. Unlike others in the catchment, there is no limit set for Ammonia at this site. The site discharges into the Pendoylan Brook which later joins the River Ely and is permitted for Final Effluent only.

BOD mg/l	Ammonia mg/l	Suspended solids mg/l
90	N/A	70

Inlet and screening

There are no inlet screens at this site but there is a scum board at the entrance to two primary settlement tanks (emptied by tanker weekly alongside the humus tanks); solids were observed at the inlet channel with a steady but low flow. An odour stronger than expected was noticeable throughout the site.



Inlet channel at site

Secondary treatment

This is comprised of two gravity filter beds which appear to be in generally poor condition. There was ponding at the surface of both beds and effluent continued to seep through ventilation gaps between breeze blocks of the filter bed structure on one of the tanks, as noted during the previous inspection in 2022, both of which compromise the treatment process. Overall, the beds continued to lack maintenance and function poorly. It was discussed on-site that there is no set maintenance regime but it is currently in discussions within DCWW.

Action: Address the seepage coming from the filter beds to ensure all effluent is remaining within the treatment process. Also, level out the gravel in the other filter bed and consider some general maintenance.



Left: Gaps between breeze block in filter bed 1.

Right: Pooling on the surface of filter bed 2.

Following this, filtered flow settles in humus tanks which are now emptied weekly, following issues raised during the 2022 inspection. At the time of inspection, these had just been emptied so did not have any fats or solids present, though the inlet to the humus tanks did show clear growths of sewage fungus and grey staining, indicative of poor treatment.





Humus tank (top), inlet pipe to humus (bottom).

Tertiary treatment

From the humus tanks, effluent goes through a reed bed before leaving site which had been cut back and secured following the previous inspection in 2022, but did not appear to be in good working condition. There was ponding on the surface throughout and the reeds appeared to be relatively few and far between; overall, better maintenance and perhaps replenishment is needed.

Action: Investigate the effectiveness of the current reed bed and provide a plan to remediate.

Action: Detail the maintenance plans for this site and what refurbishments have been done since the last inspection in 2022, or any planned in upcoming investment schemes.



Pooling on the reed bed

Outfall

The Final Effluent sample point was clearly labelled and within the site compound, yet had a noticeable odour and displayed signs of the white fungus witnessed back in 2022, albeit to a lesser extent. At the outfall itself which is easily accessible from the site, the FE appeared clear in composition but again strong in odour and white fungus deposits were visible for approx. 3-4 metres - pictured below. It is noted that the discharge point is approximately 1.5 metres from the mixing point with the Pendoylan Brook, however this same issue (to a greater extent) was recorded during the 2022 inspection.



Operational monitoring data reviewed in the site records showed ammonia readings for this site have been around 8 mg/l recently, ranging from 7-10 mg/l over the last few months but reading as high as 12-14 mg/l during the summer months. An on-the-spot sample was taken by DCWW at site and read as 15.2 mg/l at the time of visit; it is also noted that the temperature was reading 5.8 degrees Celsius and had been even colder than this earlier in the day. Although this site does not currently have Ammonia limits within its permit, this concentration far exceeds what would be considered acceptable limits and discharges into a . There is also – for operational use only – a warning “seek help” limit of 15 mg/l.

Later, a desktop audit of the regulatory monitoring samples taken at this site was conducted via WISKI, and found that there **had not been any exceedances for the permitted limits of BOD and Suspended solids** within the time period March 2019 - December 2024 [no 2025 data has yet been submitted]. Despite this, the permit is old and in need of updating to modern conditions to mitigate any such adverse environmental impacts.

Summary and actions

Due to the age of the permit, there are currently no conditions specifically referring to emissions of substances not controlled by emission limits. Nevertheless, despite an investigation and works done at site following the previous CAR, the site still does not appear to be operating optimally.

This constitutes another **non-compliance** with Condition 1 and the below consequent actions:

1. Further, more detailed investigations into the poor performance of the works and provide the results of your findings, any explanation and a time frame for the resolution of issues identified.
2. Address the seepage coming from the filter beds to ensure all effluent is remaining within the treatment process. Also, level out the gravel in the other filter bed and consider some general maintenance.

3. Investigate the effectiveness of the current reed bed and provide a plan to remediate.
4. Detail the maintenance plans for this site and what refurbishments have been done since the last inspection in 2022, or any planned in upcoming investment schemes.

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 to 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
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

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

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

Full list of water quality action criteria (used in section 1 and 2):**WQ A: Management**

- WQ-A1 General management

WQ B: Operations

- WQ-B1 Permitted activities
- WQ-B2 The site
- WQ-B3 Operating techniques
- WQ-B4 Improvement programme
- WQ-B5 Pre-operational conditions

WQ C: Emissions and monitoring

- WQ-C1 Emissions to water
- WQ-C2 Emissions to land
- WQ-C3 Emissions of substances not controlled by emission limits
- WQ-C4 Installation of monitoring boreholes

WQ D: Information

- WQ-D1 Records
- WQ-D2 Reporting
- WQ-D3 Notifications

Enforcement response

Any permit condition non-compliance 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 20 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.