

Compliance Assessment Report CAR_NRW0043324

Permit being assessed: AW1003901

For: Llanwrtyd Wells Wastewater Treatment Works, held by DWR CYMRU CYFYNGEDIG

At: Track past Glanirfon Court, Llanwrtyd Wells, Powys, LD5 4AF.

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

On 30/01/2024, between 10:48 and 11:22.

Parts of permit assessed: See Criteria Below

NRW Lead Officer: Robert Harding, accompanied by: Laura Gregory.

Report sent to: CARS Mailbox, CARS Mailbox, on 05/02/2024.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-A1 - Management - General management	Assessed (A)	
WQ-B1 - Operations - Permitted activities	Assessed (A)	
WQ-B3 - Operations - Operating techniques	Assessed (A)	
WQ-C1 - Emissions and monitoring - Emissions to water	Assessed (A)	
WQ-A1 - 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-A1	Advisory Actions- 1- Repair/replace Primary settlement Retention Boards. 2- Investigate cause and solutions for Final Settlement tank overflowing retention boards.	31/07/2024

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.

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

This was a pre-planned OSM site inspection carried out by Natural Resources Wales Officers Robert Harding and Laura

Gregory. We were shown around the site by the following DCWW representatives
Gerard Green- Senior Operations

The weather during the visit was overcast with intermittent showers. We were shown through the works from inlet through to the outfall.

General Observations

The STW is a filtration works with two filter beds in operation. The site is unmanned and has telemetry in place for monitoring. There is a storm discharge present at the site which also operates under this consolidated permit. A new consolidated permit came into effect at this site on 22/12/2023 consolidating the previous permits and adding additional emissions limits.

Inlet

The incoming flow to the site is via combined gravity sewer. Flows initially pass through a mechanical centrifuge filter which rotates to remove rag/ solids from the influent. The centrifuge filter is located within a self-contained inlet unit. The screen was clearly operation at the time of inspections and there were no signs of significant solids or rag passing through to the next stage of treatment. There is a bypass channel at the inlet with a hard-set bar screen, which can be used during maintenance on the mechanical filter.



Storm Weir

Flows from the inlet then pass through two parallel rectangular tanks, which appear to be operating as grit traps by slowing down the flow through the works. The tanks have manually operated penstocks on both ends which can be used to control flow into or out of each of the tanks. At the time of inspection all the penstocks were open, and flows were passing through freely.



The storm weir in place is a hard-set weir at the side of the channel, following from the grit traps. The storm discharge can only discharge when flows reach the level of the weir. The storm channel has no screening in place, as all flows pass through the mechanical screen at the inlet. There is Event Duration Monitoring spill meter in place to monitor storm discharges, which was clearly operational. At the time of inspection, flows were passing over the storm weir and the site was running to storm.



Primary Settlement and Overflow.

The primary settlement at the works are older square shaped tanks, with wooden scum boards for retaining solids. The two tanks are within a shared unit which flows into a joined outfall channel. Visually the settlement systems appear in need of maintenance or renewal. The scum retaining boards in several places appear to be rotten and crumbling away, specifically within the left settlement tank. This will eventually reduce their efficiency at retaining solids, so it is advisable that the wooden boards are replaced as soon as practicable.



Overall, the settlement system appeared to be retaining solids at the time. There were no signs of significant solids entering the outfall channel. sewage fungus was present on the outside of the scum boards; additionally, the base of the channels within the settlement tank area, appeared to have a persistent coverage of sewage fungus, giving it a light colour. This should be monitored as it suggests a high nutrient content, however, is not a sign of noncompliance at this point.



The outfall from the primary settlement tank leads to an additional chamber before being sent to the filter beds. There is a COPA sack in place at the entrance to the chamber, which was clearly retaining solids and allowing liquids to pass through

Filter Bed

The works contains two filter bed of stone media. The rotation arms were moving freely and unhindered. There Both rotating arms appeared to be distributing effectively during the inspection. There were no signs of ponding or dry patches across the filter beds. The filter beds appeared to be good working order and the outfall channel from the beds was flowing clear.



Humus Tanks

The site operates two rectangular final settlement tanks, with retention boards to hold back solids at both the inlet and outfall ends of the tanks. At the time of inspection, the levels within the tanks were high to the point where flows were above the level of the outfall retention boards. With flows passing over the top of the outfall retention boards the system cannot operate as designed, as there is nothing to hold back solids from the outfall. The outfall at the time of inspection showed signs of sewage fungus build up, which indicate that there is potentially a high ammonia content in the effluent. The outfall channel appeared clear of any significant solids, despite the overtopping of the retention boards.



Outfall and Sampling point

The sample point is clearly marked with signage including the sample point number. There is an MCERTS flow monitoring meter in operation before the outfall. The outfall into the river was checked and there were no signs of impact or discolouration around the outfall pipe.



Storm Tank and Storm Outfall

The storm tank on site is a rectangular tank similar to a primary settlement tank. There are retention boards on the inlet and outfall ends of the tank. There is an EDM spill monitor in place on the storm outfall channel, which was clearly operation at the time. The outfall of the storm tank discharges to the consented storm outfall point. At the time of inspection, the storm tank was full to capacity, and a discharge was being made via the storm channel. With the works running to storm at the time of inspection, this is as expected and appears compliant. A data inspection will be undertaken at a later date, to check full compliance to the storm conditions has been observed.

The storm outfall was clearly discharging into the river during the inspection. There were not signs of any discolouration of the receiving watercourse. The watercourse was in full flow following recent rainfall.



General Comments

In terms of works operation, it appears the treatment process is producing effluent within consented limits, however there are some causes for concern. The site appears to need some maintenance and updating to ensure that effluent continues to receive full treatment. Although at this point there are no noncompliances against the permitted conditions, it is advisable to undertake the following actions as they will help ensure compliance. The new permit effective 22/12/2023 has additional emissions limits, which also brings into effect OSM Tier 3 Monitoring.

Advisory Actions

1. The retention boards within the Primary settlement tanks appear in need of repair or replacement. This should be undertaken to prevent negative impacts on the treatment process
2. Investigations to identify potential improvements or changes which can be made, to prevent overtopping of the retention boards within the final settlement tanks. As this could result in ineffective final settlement during higher flow periods.

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.