

Compliance Assessment Report CAR_NRW0042097

Permit being assessed: AW1005201

For: RHAYADER STW RHAYADER, held by DWR CYMRU CYFYNGEDIG

At: RHAYADER STW, RHAYADER, , , .

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

On 14/06/2023, between 12:00 and 13:00.

Parts of permit assessed: See Criteria Below

NRW Lead Officer: Robert Harding, accompanied by: Jenny Phillips.

Report sent to: CARS Mailbox, CARS Mailbox, on 06/07/2023.

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-B2 - Operations - The site	Assessed (A)	
WQ-B3 - Operations - Operating techniques	Assessed (A)	
WQ-C1 - Emissions and monitoring - Emissions to water	Assessed (A)	

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

2. What action is required?

No action required.

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 Jenny Phillips. We were shown around the site by the following DCWW representatives
Scott Beecham- Operational Supervisor
Ben Hardwick – Site Operator

The weather during the visit was very warm and dry. There had been localised some localised rainfall events in the

preceding days. We were shown through the works from inlet through to the outfall.

General Observations

The STW is a filter bed works consisting of two filter beds which process domestic effluent only. It is manned daily by an operator (not 24/7) and has telemetry in place for monitoring out of hours. At the point of inlet to the works there is a CSO outfall pipe which is a set pipe which sits in the inlet chamber, at a height where it will discharge when levels coming into the works reach the relevant height. The CSO operates under permit AB3498CC. There is a storm discharge present at the works under Permit AW1005202. The site operates under UWWTD conditions based on the populations served.

Inlet

The incoming flow to the site is raised to the head of the works by two powered Archimedes screws. One of the screws runs constantly during normal dry weather flows. The second screw is brought online automatically when flows into the works rise, this is measured by flow level telemetry equipment. At the time of the inspection only a single (Right Hand side) hand screw was in operation.



Once at the head of the works, all flows pass through a macerator. There are two macerators on site., There were clearly operational at the time of inspection and no significant signs of solids/rag were seen passing forward. Additionally, there is a bypass channel with a hard-set bar screen, which can be manually controlled using penstocks. The bypass channel and screens are in place for use when required for maintenance of the macerators. The bypass channel was not in use at the time of the inspection.

The storm weir on site is a semi-hard-set weir setting within the flow channel following maceration. It is controlled by a flotation within the inlet channel. As the flows into the works increase, the level in the flotation chamber rises, which in turn causes the gate to close. The gate closing raises the water level within the storm weir channel/chamber, once this reaches the set height, flow will begin flowing over the weir into the storm system. When the flow then drop, the level in the chamber will lower to the point where the gate is opened and all flow will then be sent for full treatment. At the time of inspection, the gate was not closed and there was no flows entering the storm system. There was evidence that there had been recent discharges into the storm channel, as rag was visible on and around the storm weir. The storm channel does not have additional screening as all flows into the site, pass through a macerator before the storm weir.



A MCERTS flow meter is operation and was showing flows of 5.7l/s at the time of inspection. The flow meter appeared in good working order, with appropriate signage and calibration dates displayed.

Primary Settlement

There are 2 rectangular primary settlement tanks on site, with set scum boards for retaining solid. The outfall channels are manually brushed by site operatives as required. The settlement tanks both appeared to be operating effectively and solids were being retained within the boards. There were no signs of significant solids passing through to the outfall channels. The primary tanks are manually deluged when required.



The outfall from the primary settlement tank leads to a 2 way, manually controlled distribution chamber. The purpose of which is to distribute the flows to the 2 filter beds on site, and to avoid flows favouring only one filter bed. There were COPA sacs installed on all the pipes into the 2 distribution chambers. These appeared to be working effectively and were not blocked at the time of inspection. Once within each of the distribution chambers, there are siphons in place which control when flows are sent to the filter beds. The siphons are used to ensure there is ample hydrological power to rotate the rotation arms of the filter beds.

Filter Beds

The works contains a 2 circular filter beds containing stone media. The rotation arms on each were moving free and unhindered at the time of inspection. There were no signs of ponding or dry patches across the filter beds and no excessive vegetation growth. The filter housings are of concrete panel construction and appeared in good condition. The filter bed systems on site appeared to be operating effectively.



Final Settlement Tanks

There are 2 rectangular final settlement tanks on site, with set scum boards for retaining solids. The outfall channels are manually brushed by site operatives as required. The retaining boards on the left-hand settlement tank appeared to be being held in place by ropes. I asked if these are planned for repair and why this is in place. I was told the scum retaining boards contain asbestos so there are health and safety concerns when planning the repairs. Even with this in place the board appeared to be operating as designed.



Overall, the settlement system appeared to be operating effectively in preventing significant solids passing through to the outfall. There were small amounts of fungal growth present within the outfall channels. This may suggest that there is still a higher ammonia content within the effluent, however at this time it does not suggest any noncompliance with the permitted conditions.

Outfall and Sampling point

The Final effluent sampling point is clearly marked with appropriate signage including the sample point number.

The grass around the EA sample point and UWWTW sample point signs was quite high. We were advised there had been some delays with the usual ground maintenance contractor, however currently the signs were still adequately visible

The outfall appeared to be flowing clearly and there were no signs of problems within the effluent. We walked to the outfall location in the river Wye. The outfall is located close to the bank of the river wye and is located in a way where effluent gets slightly held back by the flow of the river. There were small amounts of localised sewage fungus grown close to the outfall, nothing observed further downstream, this may potentially be attributed to the pooling effect and lower flows within the Wye in this instance. It was discussed that it would be beneficial if the outfall pipe was slightly further out to prevent effluent pooling in the area and to allow the river flow to better disperse the effluent, this will be investigated by DCWW to see if there are any solutions available. Downstream of the outfall the watercourse appeared clear of any signs of pollution.



The storm outfall and CSO outfalls were also checked whilst on site. There were no signs of the outfalls discharging at the time of inspection.

Storm Tanks

There are 6 in-line open rectangular storm tanks on site, which have a joint outlets channel on the downward side of the tanks. The storm tanks are manually returned to the head of the works when required.

The storm tanks all contained water but was well below the level where it would discharge via the storm channel. There had been persistent rainfall in the preceding days, so this was to be expected. There is EDM equipment present to monitor spilling from the storm system on site. At the time of inspections, the storm tanks were empty and there were no signs of any discharge occurring.



CSO

At the time of the inspection, the water level in the inlet chamber was well below the level at which a CSO discharge would occur. There was no visual evidence to suggest the CSO has recently been discharging.

General Comments

In terms of works operation, it appears the treatment process is producing effluent within consented limits.

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.