

Compliance Assessment Report CAR_NRW0040733

Permit being assessed: AB0041501

For: BRECON STW BRECON WWTW BRECON POWYS, held by DWR CYMRU CYFYNGEDIG

At: BRECON STW, BRECON WWTW, BRECON, POWYS, LD3 7PL.

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

On 17/11/2022, between 10:00 and 11:00.

Parts of permit assessed: See Criteria Below

NRW Lead Officer: Robert Harding, accompanied by: Bethan Lewis.

Report sent to: CARS Mailbox, CARS Mailbox, on 25/11/2022.

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-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 Bethan Lewis. We were shown around the site by the following DCWW representatives

Lowri Davies- Operations Supervisor

James Jones – ICA Technician

Chris Edwards- Process Scientist

Owen Bowers– Process Scientist

Geraint Michaels
Emma Atkinson

The weather during the visit was overcast with intermittent showers, with rain 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 four filter beds which process domestic effluent only. It is manned daily by an operator (not 24/7) and has telemetry in place for monitoring. There is a storm discharge present under Permit AB0041502. The site operates under UWWTD conditions based on the populations served. There is a set of upgrades being made to the site commencing on week commencing 21st November 2022, which will be briefly detailed below. The site has high public interest and there is a well-used public right of way between the site and the river Usk.

Inlet

The incoming flow to the site is pumped up to the inlet point. There is a mechanical step screen on the inlet with a 6mm screen size. This was clearly operational at the time of inspection and there were no signs of blockages in the screen, or signs of significant debris passing through.



The UWWTD crude influent sampling point was clearly marked and allowed a representative sample of the influent to be taken. The sampling equipment is fixed in place and self-contained. A New Magflow meter (MCERTS) is also planned to be installed during the planned site upgrades.

The incoming flows (post screening) then enter a grit removal trough before reaching the storm weir. This slows down the flow and allows grit to settle out at the bottom of the trough.



The storm weir on site is a hard-set weir setting, which only discharge once flows reach the set level. The flows were well below the storm weir setting in place and there were no flows entering the storm channel at the time of inspection. The storm channel appeared clear of debris or blockages. The storm channel does not have additional screening as all flows into the site, pass through the 6mm screening and grit removal trough before the storm weir.



Primary Settlement

There are 4 circular primary settlement tanks on site, with rotating bridges, scum boards for retaining solids and brushes on the outfall channels. All settlement tanks have monitoring equipment in place. Settlement tanks 1-3 all appeared to be operating effectively. there were no signs of significant solids passing through to the outfall channels.



The 4th settlement tank bridge was not rotating and presented with much more solids/scum present within the tank. There was some evidence of solids passing through to the outfall on this tank, however it was not a significant amount and largely the outfall channel appeared clear. Most of the scum and solids was still being retained by the scum retaining boards. I was advised that the bridge system had failed and was being replaced with a new bridge in the planned improvement works (commencing 21st November). A OPNOT is planned to be submitted for this instance. All primary tanks are being upgraded to automatic de-sludge in the planned works.



Overall, the settlement system appeared to be operating effectively in preventing significant solids passing through to the next stages of treatment.

The outfall from the primary settlement tank leads to a 4-way distribution chamber. The purpose of which is to distribute the flows to the 4 filter beds on site. There were COPA sacs installed on all the pipes into the 4 distribution chambers. These appeared to be working effectively and were not blocked at the time of inspection. Once distributed, the flows pass on to treatment in the filter beds.



Filter Beds

The works contains a 4 circular filter beds containing stone media. The rotation arms on each were moving free and unhindered. There were no signs of ponding or dry patches across the filter beds and no excessive vegetation growth. The filter housings are of brick construction and appeared to have been in place for some time, showing signs of wear. Metal banding has been installed on the filter beds to support the brick walls, and this appears to be in good order. I did not observe any signs of major leakage form any of the filter bed walls on site. The outfalls from the filter beds appeared to be flowing freely and clear of signs of ineffective treatment. The filter bed systems on site appeared to be operating effectively.



Final Settlement Tanks

There are three circular final settlement tanks on site, each with rotating bridges and brushes on the outfall channel. Monitoring equipment is in place. These all appeared to be operative effectively, and there were no signs of excessive carry over of solids or signs of sewage fungus present. The final settlement system appeared in good order.



Outfall and Sampling point

The final effluent then passes through a Magflow flow meter, which appeared to be operating as required and accessible for inspection. The Magflow meter is located in what appears to be a straight section of pipe, which is preferable to provide reliable flow readings. The MCERTS monitor was clearly operational at the time of inspection. The Final effluent sampling point is clearly marked with appropriate signage including the sample point number.



There is a UWWTD sampling point present which was well marked and easy to access. The intake pipe for the sampling equipment is situated within the outfall chamber, and in a suitable location for an indicative sample to be taken. The equipment is fixed and appeared to be suitably operational.



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 Usk. The outfall is located within the riverbed towards the centre of the river, at the time of inspection this was submerged and not visible however can be seen during very low flows. No signs of problems were seen around the outfall point.

Storm Tanks

There are 4 connected, open rectangular storm tanks on site, which fill sequentially and have outlets on the final tank. The storm sewage must fill the final tank in the sequence to a set level before any effluent will pass into the storm outfall. 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.



Upgrades

There planned upgraded to the upcoming works include the following

- Magflow Installation at Inlet
- Replacing Faulty Primary Settlement Tank Bridge

- Installation of Ferric Dosing System
- Installation of Sodium Bicarbonate Dosing System
- Changing all Settlement tanks to auto-sludge return

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.