

Compliance Assessment Report CAR_NRW0043284

Permit being assessed: BG0002201

For: CAPEL BANGOR WWTW FE CEREDIGION, held by DWR CYMRU CYFYNGEDIG
At: CAPEL BANGOR WWTW FE, CAPEL BANGOR, CEREDIGION, .

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

On 05/12/2023, between 10:53 and 11:16.

Parts of permit assessed: Conditions 1; 2; 3; 4; 6; 8; 9.

NRW Lead Officer: Bethan Lewis, accompanied by: Heidi Markham.

Report sent to: CARS mailbox, CARS mailbox, on 02/02/2024.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
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	C4 No impact	Condition 3

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

2. What action is required?

Criteria	Action needed	Complete by
WQ-C1	Clear the original final effluent sample point to enable representative spot samples of the discharge to be obtained, or appropriately label the outlet of the filter bed as the final effluent sample point, so long as representative spot samples of the discharge can be obtained at this location.	08/04/2024

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 site inspection at Capel Bangor Wastewater Treatment Works (WwTW) (permit number: BG0002201) carried out by Natural Resources Wales (NRW)

Officers Bethan Lewis and Heidi Markham. The NRW Officers were accompanied during the site inspection by Dŵr Cymru Welsh Water (DCWW) Operatives including an Operational Supervisor, Operations Coordinator and Performance Manager.

Summary

The site inspection commenced at 10:53 hours on the 05 December 2023 and concluded at 11:16 hours. The weather at the time of the inspection was cold but dry with sunshine and clouds. The previous day's weather consisted of some showers.

The NRW Officers were led through the treatment process from inlet to final effluent sampling point, with the DCWW Operatives explaining how the works operated.

Capel Bangor WwTW processes domestic effluent only. The site has no electrical power or telemetry for monitoring and the site operator visits the site once a fortnight.

The population equivalent for the site is 187.

Treatment Process

With no electrical power, the treatment process at Capel Bangor WwTW is entirely gravity driven. Flows enter at the inlet as shown in photograph 1 below. At the time of the inspection, the DCWW Operatives were surprised to see what appeared to be newly installed surface water/land drainage pipes (shown in blue in photograph 1) discharging at the inlet. It is possible that these were installed by a third party without DCWW consent. As no storm overflow exists at Capel Bangor WwTW, the addition of surface water at the inlet has the potential to overwhelm the treatment process, although the effects of this are expected to be minimal given that the site gradient should force flows downwards towards the filter bed during storm conditions. Conditions 4 and 6 of permit BG0002201 state that "*the volume of the Discharge shall not exceed 161 cubic metres per day*" and "*the rate of discharge shall not exceed 1.9 litres per second*" respectively. With a population equivalent of 187, these limits are unlikely to be exceeded by the addition of a small amount of surface water at the inlet. It is however something for DCWW to bear in mind if the population equivalent and/or volume of surface water discharging at the inlet increases.



Photograph 1: Capel Bangor WwTW inlet. Surface water/land drainage pipes in blue.

At the inlet, flows split into two below ground septic tanks as shown in photograph 2 below. The septic tanks are desludged 2-3 times a year. DCWW would endeavour to desludge the septic tanks 4 times a year, or once every quarter; however, as the WwTW may only be accessed by crossing private property, part of which is grass rather than track, the septic tanks can only be desludged when weather conditions allow and landowner agreement has been sought.



Photograph 2: Below ground septic tanks at Capel Bangor WwTW

Flows from the septic tanks rejoin and cross the Afon Melindwr in a single raised effluent pipe as shown in photograph 3 below. As with any other effluent pipe crossing a watercourse, DCWW are advised to monitor and maintain the pipe as necessary to avoid causing pollution to the watercourse.



Photograph 3: Raised effluent pipe crossing Afon Melindwr at Capel Bangor WwTW

On reaching the opposite bank, flows enter a chamber which feeds a single stone media filter bed as shown in photograph 4 below. A certain level must first be reached within the chamber before effluent discharges into the rotating arms of the filter bed and subsequently across the surface of the stone media. The rotating arms of the filter bed are therefore not always in operation and start and stop as and when the chamber fills. At the time of the inspection, the rotating arms were rotating unhindered. Some leaf litter was present at the surface of the stone media, however this was not excessive and unlikely to impact the treatment process. The filter bed wall appeared in relatively good condition other than a single crack patched up with cement near the outlet of the filter bed as shown in photograph 5 below.



Photograph 4: Stone media filter bed at Capel Bangor WwTW and distribution chamber (foreground right)



Photograph 5: Crack patched up with cement in filter bed wall

Photograph 6 below shows final effluent exiting at the outlet of the filter bed. As previously mentioned, conditions 4 and 6 of permit BG0002201 state that "the volume of the Discharge

shall not exceed 161 cubic metres per day" and "the rate of discharge shall not exceed 1.9 litres per second" respectively. There was no indication from the volume of final effluent exiting the filter bed that these limits were being breached at the time of the inspection. Sewage fungus was visible within the outlet of the filter bed, however as permit BG0002201 is descriptive with no limits set for parameters such as Biochemical Oxygen Demand (BOD), suspended solids, ammoniacal nitrogen etc. within the final effluent, this is unlikely to represent a breach of permit.



Photograph 6: Final effluent at filter bed outlet

As shown in photograph 7 below, the final effluent outfall and sampling point at Capel Bangor WwTW were found to be overgrown and inaccessible at the time of the site inspection with little maintenance having been undertaken. Condition 3 of permit BG0002201 states that an *"appropriately labelled sample point shall be provided and maintained at National Grid Reference SN 65044 80298 ... so that a representative spot sample of the Discharge may be obtained"*. As the final effluent sample point was overgrown and inaccessible at the time of the site inspection, a permit breach has been recorded above. As spot samples could however be obtained from the outlet of the filter bed, this breach has been recorded as a category 4 breach only - a breach which has no potential environmental effect. To rectify this breach, DCWW are asked to either clear the original final effluent sample point to enable representative spot samples of the discharge to be obtained, or appropriately label the outlet of the filter bed as the final effluent sample point, so long as representative spot samples of the discharge can be obtained at this location. DCWW are asked to complete this by no later than the **08 April 2024**. Although permit BG0002201 does not require the final effluent outfall to be made accessible, DCWW are also advised to clear the outfall to ensure that the discharge and watercourse can be visually inspected to ensure appropriate dilution and no growth of sewage fungus.



Photograph 7: Final effluent sampling point and outfall into unnamed tributary of the Afon Melindwr

Final comments

We wish to thank the DCWW Operatives for accompanying the NRW Officers at the time of the above inspection. If DCWW wish to discuss the content of this CAR, we encourage them to contact the NRW Officer noted above.

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) order 2012.

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.