

Compliance Assessment Report CAR_NRW0040763

Permit being assessed: CG0024001

For: BEDDGELERT WASTE WATER TREATMENT, held by DWR CYMRU CYFYNGEDIG

At: BEDDGELERT WWTW, BEDDGELERT, GWYNEDD, WALES, .

Type of assessment carried out: Audit, Reason: Routine.

On 01/12/2022, between 10:30 and 12:00.

Parts of permit assessed: Whole permit

NRW Lead Officer: Simon Roberts, accompanied by: Eurnyn Roberts.

Report sent to: Victoria Collier, Catchment Manager North West Wales – Wastewater Treatment, on 15/12/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-C1 - Emissions and monitoring - Emissions to water	C3 Minor	Permit condition 15. Works Operation: The works shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the discharge made from the works on controlled waters.
WQ-A1 - Management - General management	C4 No impact	Permit condition 16 (c) - Maintenance: The works shall be operated and maintained in accordance with good operational practice such that: (c) Tanks shall be desludged at sufficient frequency and in such a manner to prevent excessive carryover of suspended solids.
WQ-A1 - Management - General management	C4 No impact	Permit condition 16. Maintenance - The works shall be operated and maintained in

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
		accordance with good operational practice
WQ-A1 - Management - General management	C4 No impact	Permit condition 16. - Maintenance: The works shall be operated and maintained in accordance with good operational practice
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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	Review and improve operating procedures so that discharge is adequately treated and sewage fungus is not present around outfall.	31/01/2023
WQ-A1	Improve maintenance and desludge operation of primary settlement tank.	31/01/2023
WQ-A1	Improve operations regarding stagnant effluent 'moat' around filter beds	28/02/2023
WQ-A1	Improve maintenance of filter beds regarding vegetation growth	28/02/2023
WQ-A1	Improve maintenance of final effluent chamber and investigate if impacts from fluvial flooding can be avoided.	28/02/2023

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

On Thursday the 1st December 2022, NRW officer Simon Roberts accompanied by Senior
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Officer Eurn Roberts carried out a OSM (operator self-monitoring) audit at Beddgelert Sewage Treatment Works (Permit Id CG0024001).

NRW where accompanied by the DCWW catchment manger Victoria Collier and Ian Roberts, supervisor for the Dwyfor area.

The weather on the day of the visit was dry and sunny.

The site was visited as part of an audit on the permitted discharges into Afon Glaslyn at Beddgelert. The local community council have previously raised concerns with the amount of storm overflow discharges made into the Glaslyn from DCWW's sites around Beddgelert. The intention of the visit was to see the site, to ensure its compliant with its permit, and if possible, to reduce the frequency of storm discharges and hence improve water quality in the Glaslyn.

The site was operating as normal with incoming flows being pumped from the pumping station and passing through the screen mulcher. The works were treating 6.3l/s flow, with anything over 6.3l/s being sent to the balancing tanks, to be returned to the works once flow rates dropped.

It was explained that the primary tanks were being de-sludged 3 times a week. However, photographs taken of the primary tank showed excessive sludge and organic matter growing within the tanks and outlet, suggesting maintenance of the primary tanks had not been as regular as required. It is recommended that this is looked into.



Photo of primary tanks with excessive volume of sludge.



Photo showing organic matter growth in primary tank.

The filter beds on site were operating as normal, however it was noted that there was excessive grass growth on the surface of the filter beds suggesting asset had not received sufficient maintenance recently. It was explained that this was difficult due to the presence of a plastic guard on top of the filter bed.



Photo of grass growth on surface of filter beds.

Both filter beds were surrounded by a stagnant effluent 'moat', where there appeared to be little or no flow. It was unclear what was the cause of this, and if a blockage caused by fluvial flooding was causing the system to back up. It did raise the question if the site was being operated as intended, or as effectively as possible?



Photo of stagnant final effluent 'moat' around filter beds.

The MCERTs calibration was in date with a valid calibration certificate in place. Date of last calibration 09/07/2020.

Date of next calibration January 2023.

The flow on the MCERTS during site visit was 6.66l/s.

Please note that rate of discharge in permit CG0024001 is down as 6.2 litres per second (Permit condition 6 - volume).

The final effluent tank showed clear impact from recent flooding, with mud deposits surrounding the tank and along the centre walkway. The mud was also present in the final effluent tank, which appeared untidy and in need of maintenance. It is noted that the entire site sits within an area prone to a high risk of flooding, however the site appeared to be unprotected from this risk - there were no bunds protecting the site from flood risk.



Photo of condition of final effluent tank, with clear signs of mud deposit in and around tank, from fluvial flooding.

We also note that the site appears to have little protection from any trespass. The site lies

within a 100m from a popular footpath along Afon Glaslyn, yet there was no appropriate security fencing surrounding the site. Although it was stated that no issues had ever occurred with trespass at the site, we would recommend that DCWW review the security provisions at the site in order to avoid any potential accidents or environmental impacts.



Photo showing STW's perimeter fencing

NRW were able to view the outfall pipe into the Glaslyn. It was stated that the final effluent and storm overflow both discharged into the Glaslyn from the same pipe. During the visit there was adequate flow in the river, and the final effluent was seen to be discharging into the Glaslyn, indicating that at the time there were no issues with the river levels causing the final effluent to back up to the works. The final effluent discharge appeared clear, and we detected no odour. We did however see signs of sewage fungus in the watercourse around the outfall. The fungus was seen on vegetation and on branches in the watercourse. We managed to trace evidence of sewage fungus to approximately 20m downstream from the outfall location.



Photo of final effluent outfall



Photo of sewage fungus downstream of outfall.

Since any storm overflow should be highly diluted, we question what could be causing this sewage fungus growth around the outfall? Are the treatment works working as effectively as possible, or are there issues with fluvial flooding, stagnant effluent 'moat' and need to de-sludge and maintain the primary tanks causing in-combination impacts to the treatment process at the site?

We would ask that DCWW investigate these matters with some urgency and provide NRW with a report of how the treatment works could be improved to prevent any environmental incidents.

From the Rivers Trust website it could be seen that the Beddgelert storm overflow had spilt 174 times during 2021 for a total of 2871 hours. Back in 2020 it was reported that the storm overflow had spilled 364 times for a duration of 5352 hours (the equivalent of 223 days). Is this correct and are the data accurate? Please confirm whether any action is planned in the catchment to reduce this spill rate, or not.

NRW would like to thank Victoria and Ian for their time on the day.

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.