

Compliance Assessment Report CAR_NRW0046436

Permit being assessed: AB0076001

For: Libanus Wastewater Treatment Works, held by DWR CYMRU CYFYNGEDIG

At: Libanus, Brecon, Powys, LD3 8ND.

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

On 13/02/2025, between 11:06 and 11:36.

Parts of permit assessed: See Criteria Below

NRW Lead Officer: Robert Harding.

Report sent to: CARS Mailbox, CARS Mailbox, on 24/02/2025.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-A1 - Water Quality - Management - General management	C3 Minor	1.1.1 The operator shall manage and operate the activities: (a) in accordance with a written management system that identifies and minimises risks of pollution so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and (b) using sufficient competent persons and resources.
WQ-A1 - Water Quality - Management - General management	C3 Minor	1.1.1 The operator shall manage and operate the activities: (a) in accordance with a written management system that identifies and

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
		minimises risks of pollution so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and (b) using sufficient competent persons and resources
WQ-B3 - Water Quality - Operations - Operating techniques	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	Clean up the sewage fungus build up within the Final Settlement out and below the outfall into the river. Provide confirmation and pictures to show that this has been completed by 14/03/2025.	14/03/2025
WQ-A1	1- Clean up the sewage fungus build up within the Final Settlement out and below the outfall into the river. Provide confirmation and pictures to show that this has been completed by 14/03/2025.	14/03/2025
WQ-B3	Advisory Action- Investigate whether changes are required to the aerator timing sequences to improve the treatment process.	14/03/2025

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.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

This was a pre-planned OSM site inspection conducted by Natural Resources Wales Officer Robert Harding. I was shown around the site by the following DCWW representatives.
BB- Senior Operations

OB- Process Scientist

The weather during the visit was dry and cold. I was shown through the works from inlet through to the outfall.

General Observations

The works is a small, unmanned works which consisting of an activated sludge treatment system, which is mostly housed within a contained in a below ground housing. In appearance the treatment process is within a circular tank which is separated into 3 separate outer sections, with a final settlement tank within the centre. Monitoring is in place in the event of any mechanical failure.

Inlet

The incoming flow to the site is from a gravity sewer. The incoming flow passes through a macerator at the inlet, which appeared to be operating at the time of inspection. There is a bypass channel with a 12mm Bar screen in place, which is controlled by manually moving penstocks on the inlet and bypass channel. This bypass can be used when undertaking maintenance to the macerator. The bypass channel was not in use at the time of inspection. There were no signs of significant solids passing through to the next stage of treatment.

Aeration/ Activated Sludge Treatment

The macerated flows from the inlet then pass into the main treatment chamber of the works, which is located closest to the inlet of the works. This chamber is the activated sludge tank which has aerators to maintain the required Dissolved oxygen levels within the tank to encourage bacterial breakdown of the influent. A dissolved oxygen probe is in operation to monitor levels and was clearly operation at the time of the inspection. The aeration pumps operate on a set timer to control the oxygen levels within the treatment chamber. At the time of inspection, the aerators were not initially active. I questioned whether this was an issue, as without aeration there could be a reduced amount of treatment. I was advised that it was likely as a result of the incoming flows containing higher levels of dissolved oxygen, in which case less aeration would be required.



The second chamber next to the main aeration chamber (left hand side) contains the activated sludge returns, which receives effluent from the final settlement tank, and feeds back into the aeration chamber. This is to ensure that an appropriate amount of activated sludge is maintained to maintain the bacterial breakdown process. A level sensor and Dissolved Oxygen probe are in operation to monitor this chamber.

The final chamber within the outer ring of the works is in use as a sludge holding tank. As this is a sludge holding tank, it does not form part of the treatment process. The sludge tank appeared full of water at the time of inspection and had visual blooms of common water fleas (*Daphnia*) present. This is not any indication of noncompliance, or signs of issues within the treatment process. A sample was collected by DCWW operatives whilst on site.

Final Settlement Tank

In the centre of the treatment system tank is a circular Final settlement tank. The tank does not have a rotating bridge in place and uses scum retention boards, to hold back solids from the outfall and to promote sludge settlement. There did not appear to be any significant solids passing over into the outfall channel. However, there was a visible and persistent build-up of sewage fungus present within the outfall channel, suggesting a high ammonia content or issues within the treatment process. The level of build-up is a cause for concern, as it indicates that appropriate maintenance and cleaning has not been taking place, which increases a risk of pollution being caused, especially as there is no further staged of treatment before the outfall. This is therefore a breach of permit condition 1.1.1 (a) which states.

*** Noncompliance ***

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1. *The operator shall manage and operate the activities:*
 - a. *in accordance with a written management system that identifies and minimises risks of pollution so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and*
 - b. *using sufficient competent persons and resources.*

This has been classified as a category 3 noncompliance, as this could potentially have a minor impact on the receiving watercourse.



Outfall and Sampling point.

The Final effluent sampling point is clearly marked with appropriate signage including the sample point number. The sampling point appeared appropriate for an indicative sample to be taken. The outfall appeared to be flowing clearly. There was a white appearance at the base of the effluent chamber, which I suspect was sewage fungus growth, based on the appearance of the final settlement outfall channel. The site has an MCERTS Flow monitor in place before the sample chamber, which was clearly operational at the time of inspection. The Meter display is located within the building on site.

The outfall into the Afon Tarell was inspected, and there was a visible build up of grey sewage fungus on the surface of the rocks below the outfall pipe. The fungus was present on all parts where the effluent passes over the rocks, which is partially due to the outfall pipe being situated further back on the riverbank. During higher flows it is likely that the river is much closer to the outfall pipe. The sewage fungus build up indicates high nutrient levels within the effluent over a period of time and is a negative impact on the receiving environment. This is therefore an additional breach of permit condition 1.1.1 (a), as the effluent is clearly having a negative impact on the receiving watercourse (and riverbank).

*** Noncompliance ***

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1. *The operator shall manage and operate the activities:*
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 - b. *using sufficient competent persons and resources.*

This has been classified as a category 3 noncompliance, as this could potentially have a minor impact on the receiving watercourse. There were no signs of downstream discolouration or sewage fungus present within the main body of the watercourse at the time of inspection.



General Comment

The sewerage fungus present on the riverbank below the outfall (and final settlement outfall channel) is a cause of concern as it suggests issues with the treatment process and poor effluent quality. Records do not show that there have been any recent sampling exceedances at this location, however there is a clear visual impact. The site received updated emissions limits effective 15/12/2023. The works appears to require increased monitoring/maintenance, to prevent the excessive sewerage fungus build up which was present at the time of inspection.

Actions required by 13/03/2025.

1. Clean up the sewage fungus build up within the Final Settlement out and below the outfall into the river. Provide confirmation and pictures to show that this has been completed by 13/03/2025.
2. Advisory Action- Investigate whether changes are required to the aerator timing sequences to improve the treatment process. As the aerators did not appear to be running for quite some time whilst on site. Improved aeration may help improve effluent quality.

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.