

Compliance Assessment Report CAR_NRW0043263

Permit being assessed: AG0009201

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

At: Llancarfan, Barry, Vale of Glamorgan, CF62 3AG.

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

On 16/01/2024, between 11:50 and 12:30.

Parts of permit assessed: Relevant conditions

NRW Lead Officer: Harry Warburton, accompanied by: Hannah Jenkins, Alexander Grainger.

Report sent to: CARS Mailbox, CARS Mailbox, on 08/04/2024.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-B1 - Water Quality - Operations - Permitted activities	C3 Minor	2.2.1

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

2. What action is required?

Criteria	Action needed	Complete by
WQ-B1	Effluent has overtopped the sludge drying beds due to them being used as improvised and improper use as storm storage. This has caused a spill to the land surrounding the beds. Provide information as to how long the drying beds have been used like this and what it being done to resolve the issue.	20/05/2024

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.

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

On the 16th of January 2024 Environment officer Harry Warburton, accompanied by fellow officers Hannah Jenkins and Alexander Grainger attended Llancarfan sewage treatment works, permit AG0009201, to conduct a site inspection where we met Dŵr Cymru Welsh Water operators. This was following on from earlier visits to Aberthaw East and West STW. The weather at the time was dry with near freezing

temperatures, this was the same for the days prior.

The site consists of an on-site pumping station, inlet, primary settlement tank, percolating filter bed, humus tank, sludge drying beds, sampling point and outfall

Pumping station

The manhole for the site inlet to the pumping station had evidence of a spill around it. There is known issues for surface water infiltration in this catchment that is causing the treatment works to become overwhelmed during high rainfall events. To compensate for this a temporary measure was put in place to over pump some of the effluent to the sludge drying beds, bypassing the inlet and primary settlement. This was first recorded as WIRS 2000320 on the 28th of January 2020. This temporary measure seems to have been in place for 4 years, thus meaning that the effluent has not undergone full treatment and is being used as improvised storm storage.

Inlet

The inlet to the works goes straight to the primary settlement tank. The inlet appeared in good order.



Primary settlement

After the inlet is the primary settlement tank, this also appeared in good order. The outlet to the primary tank has a Copa sac screen.

**Filter bed**

Following the primary tank the effluent then goes through the percolating filter bed. The bed had even distribution, however there is quite heavy moss growth on the filter media.



Humus tank

The humus tank appeared in good working order with no carry over of solids.



Sludge drying beds

There are four sludge drying beds located at the back of the site. There was sludge on the ground around all the drying beds indicating that they had overtopped. There were pipes going over and into the sludge beds, with evidence of scouring on the surface of the sludge bed, which shows effluent has been pumped into the sludge beds, which seems to be the cause the overtopping.

The sludge beds also have drainage channels for the settled sludge.



Sampling point and outfall

There is a labelled sampling chamber on site. The effluent discharges to the Nant Llancarfan. At multiple points downstream of the outfall sewage fungus was visible. Due to this a sample was taken of the discharge from the sampling point. The results came back as: BOD 7.14mg/l, suspended solids at 19mg/l, and ammonia at 4.03mg/l.

**Actions**

1. Please explain the layout and the reasoning behind the over pumping on site, as well as how long it has been going on for and what plans are in place to improve this situation.
2. Please also explain where the effluent from the sludge beds goes after it is pumped into them.
3. There is quite significant moss growth on the filter bed media, please can this be removed.

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.