

Compliance Assessment Report CAR_NRW0044686

Permit being assessed: AD0002101

For: Llanfrynach Wastewater Treatment Works, held by DWR CYMRU CYFYNGEDIG
At: Track opposite Tŷ Mawr Cottages, Llanfrynach, Nr Brecon, LD3 7LJ.

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

On 24/06/2024, between 11:06 and 11:45.

Parts of permit assessed: See Criteria Below

NRW Lead Officer: Robert Harding.

Report sent to: CARS Mailbox, CARS Mailbox, on 05/07/2024.

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 activity: (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-B1 - Water Quality - Operations - Permitted activities	Assessed (A)	
WQ-B2 - Water Quality - Operations - The site	C4 No impact	3.3.4 - Accessible monitoring points shall be provided and maintained to enable the emissions

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
		monitoring programme and the environmental or other monitoring to be carried out at the monitoring points specified in table S3.4 of schedule 3 and shown marked on the site plan in schedule 7".
WQ-C1 - Water Quality - Emissions and monitoring - Emissions to water	Assessed (A)	
WQ-C3 - Water Quality - Emissions and monitoring - Emissions of substances not controlled by emission limits	C3 Minor	3.2.1- The operator shall take appropriate measures to minimise so far as reasonably practicable the polluting effects of the emissions of substances in the discharge not controlled by emission limits (excluding odour).

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	DCWW to review site maintenance schedules. Specifically regarding sludge removal from settlement tanks	30/09/2024
WQ-B2	Provide specific details for installing a suitable sample point - Including plans for what is it to be installed and expected completion dates	30/09/2024
WQ-C3	Clean up the sewage fungus around the outfall into the watercourse, and investigate root cause of build up.	30/09/2024

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

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

OB– Process Scientist

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

General Observations

The STW is a filter bed works with a permitted storm discharge. The works received a new consolidated permit which came into effect on 25/03/2024, bringing together the STW and Storm discharges, as well as bringing into effect further water quality emissions limits. The added emissions limits have resulted in the works now falling under Operator Self-Monitoring tier 2 sampling requirements.

Inlet and Storm

The incoming flows into the works are through a combined gravity sewer. There is a storm discharge at the site, which was previously permitted separately, but now is contained within the new consolidated permit.

The flows into the works arrive at the inlet and pass the storm weir before passing into the primary settlement tanks. There is no screening in place at the works.

The storm weir on site is a hard-set concrete weir within the inlet channel. Flows can only overflow into the storm channel once levels reach a certain height. At the time of inspection, the works were not running to storm, as the flows were well below the weir height. The storm channel appeared completely dry and there were no indications of the site running to storm.



There is a single rectangular storm tank in operation on site. The outfall channel is located at the top of the tank, meaning a discharge can only be made once the storm storage is fully utilised and levels are high enough to pass into the channel. The storm tank was empty at the time of inspection, and visually looked like it had not been used for some time. There is an EDM level sensor in operation within the storm tank. The storm tank on site is manually returned to the head of the works as required.



Primary Settlement

The primary settlement tanks are two parallel rectangular tanks, with retention boards to retain solids within the tank and slow down flows. Both tanks had what appeared to be a thick surface coverage of sludge/scum, which was being contained within the tanks by the retention boards. I questioned when the primary was next due for sludge removal and was advised that the tanker was due later that day. The sludge is manually removed by a tanker every two weeks.

There was evidence of some solids passing through from the primary settlement tanks and a visible blanket of sewage fungus within the outfall channels of the tanks. This sewage fungus build up likely indicates higher nutrient content in the effluent. It would be advisable to investigate whether this can be prevented by increasing the frequency of tanker removal, as this could potentially lead to problems within the final effluent.

There is a syphon chamber at the outfall of primary settlement tanks. This is to allow water levels to build up to a suitable level before flows are sent through to the filter bed. This is due to the works being gravity powered and needing to make sure there is ample hydrological pressure for the filter bed arms to rotate sufficiently.

Overall, the primary settlement system did not appear to be completely effective, as there were signs of solids passing over and sewage fungus present within the outfall chambers.



Filter Bed

The works contains two small filters bed of stone media. On arrival at the works the filter arms were not rotating, as the syphon had not yet sent flow into the filter beds. Once the syphon activated, the rotation arms were moving freely and unhindered. There were no signs of blocked outlets and the rotating arms appeared to be distributing effectively. There were no signs of ponding or dry patches across the filter beds. There was a slight coverage of moss on surface of filter bed two, however this was not excessive and did not appear to be preventing distribution to the filter media.

Overall, the filter bed at the works appeared to be operating effectively.



Final Settlement

The site has two parallel rectangular final settlement tanks, with retention boards to retain solids within the tanks. There was a coverage of sludge present within the tanks, which was largely being retained by the rendition boards. There were some sludge/solids visible within the outfall channel from the right-hand side settlement tank. This was largely being stopped from getting to the outfall by the brickwork within the tank, however this could easily be flushed into the outfall of the works during high flows or rainfall. At the time of inspection, the effluent from the final settlement tank appeared to be running clear, but the solids in the outfall are a cause for concern. Overall, the final settlement system did not appear to be operating effectively.

Outfall and sampling point

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*******Noncompliance*******

There currently is no labelled sampling point at the works at the location stated within table S3.4 of the permit. Which is therefore a noncompliance of condition 3.3.4 of the permit, which states the following.

“3.3.4 - Accessible monitoring points shall be provided and maintained to enable the emissions monitoring programme and the environmental or other monitoring to be carried out at the monitoring points specified in table S3.4 of schedule 3 and shown marked on the site plan in schedule 7”.

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This has been assigned a category 4 noncompliance as there is likely no likely impact to the receiving environment, as it is still possible to sample the effluent at the outfall. However, as this is not the location stated within the permit there is a noncompliance. The outfall into the river is some distance from the treatment process, so it is not certain that the effluent from the pipe is subject to any other inputs or ingress.

It was discussed on site that installation of a sampling point within the site compound may be challenging, as the existing infrastructure is quite deep, so any chamber will have to be dig deep into the ground. It was discussed that DCWW could potentially install a sampling point at the outfall. If this is the case a permit variation will be required to provide an accurate sampling point location.

The outfall into the watercourse was inspected. At the time of inspection there was a build up of sewage fungus present both around the outfall pipe and on the riverbed where the effluent enters the watercourse. The sewage fungus was largely localised at the point of ingress but was clearly as a result of the effluent from the WWTW. Based on the evidence seen on site, I determine that the effluent has been causing a negative impact on the receiving watercourse.



*******Noncompliance******

The effluent from the WWTW is having a negative impact on the receiving watercourse and is therefore causing a pollution. This may have been prevented by improved monitoring and maintenance on the site. This is therefore a noncompliance against the following permit conditions.

1. *The operator shall manage and operate the activity:*
 - 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 assessed as a category 3 noncompliance based on the low level impact to the receiving watercourse. This noncompliance is assigned as the evidence suggests that the pollution may have been as a result of a lack of maintenance

and monitoring of the site. The visible sludge build-ups and carry over from primary and final settlement tanks will have attributed to the sewage fungus growth at the outfall.

*******Noncompliance*******

3.2.1 *The operator shall take appropriate measures to minimise so far as reasonably practicable the polluting effects of the emissions of substances in the discharge not controlled by emission limits (excluding odour).*

This has been assessed as a category 3 noncompliance based on the low level impact to water quality within the receiving watercourse. Ammonia and Biochemical oxygen demand are not currently the out within emissions limits, however the presence of sewage fungus indicates increased nutrient loading in the effluent, therefore condition 3.2.1 applies.



General Comments

The works is a small and slightly secluded works. Access to the site is over a small bridge with a weight limit, and additional sign stating that it is not suitable for vehicles. As a result of this, over-and pipes have been put in place so the site can be tankered out without needing to cross the bridge. Overall, the site appears in need of improved maintenance and monitoring, as the effluent was clearly having a negative impact on the receiving watercourse. I make note that this site operated under a descriptive permit before the current permit came into effect. This site will now be subject to operator self-monitoring requirements.

Actions required- by 30/09/2024.

1. Provide specific details for installing a suitable sample point at Llanfrynach WWTW- Including plans for what is to be installed and expected completion dates.
2. DCWW to suitably clean out the outfall area into the watercourse, to remove sewage fungus build up. Provide confirmation that this has been completed.
3. Investigate the cause for the sewage fungus build up and around the outfall, and update site process as required to prevent reoccurrence of this issue. Provide details of the investigation and subsequent finding.

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.