

Compliance Assessment Report CAR_NRW0037559

Permit being assessed: BP0251001

For: Llechryd WTW Llechryd Near Cardigan, held by DWR CYMRU CYFYNGEDIG

At: Llechryd, Nr Cardigan, Dyfed, SA43 2QN.

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

On 16/10/2020, between 10:30 and 12:50.

Parts of permit assessed: See criteria below

NRW Lead Officer: Jeremy Goddard, accompanied by: Emma Sharp.

Report sent to: CARS inbox, CARS inbox, on 11/02/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-A1 - Management - General management	Assessed (A)	
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	Action only (X)	
WQ-D1 - Information - Records	Assessed (A)	
WQ-D2 - Information - Reporting	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-C1	Please investigate and confirm in writing the reason for a 15-minute flow discharge reading of 40.96 litres per second at 11.30 hours on 04/11/2019. This is over twice the maximum discharge rate of 20 litres per second.	15/03/2021
WQ-D2	Please investigate why there are no results logged against the OSM sample taken on 13 November 2019 and why this sample has not been reported to Natural Resources Wales, even if it is a 'no flow' result. Please respond in writing.	15/03/2021

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 audit carried out by Natural Resources Wales officers Jeremy Goddard and Emma Sharp who were accompanied by Dwr Cymru operatives Sarah Harries, Sarah Mason, Sam Fagan and Chris Gray.

General Observations:

The audit commenced at 10:30 hours on 16 October 2020. The weather at the time of the visit was dry and sunny.

Officers were taken through the process from the inlet, through the treatment system before finishing at the trade effluent discharge point into the Afon Teifi (which is slightly downstream of the water abstraction point). Whilst on site we also visited the discharge point for the other Environmental Permit (BN0019101). Any specific points in relation to this permit will be covered in the separate compliance assessment report: CAR_NRW0037566.

At the time of the visit Dwr Cymru staff and contractors were preparing to undertake a raw water bank side storage tank clean under Section 165 of the Water Industry Act 1991. This would involve a portion of the water within the tank being discharged into the Afon Teifi with the sludge at the bottom of the tank and any effluents generated during the cleaning process disposed of appropriately off site. SSSI assent and Habitats Risk Assessment to discharge the clean raw water back into the Afon Teifi (designated SAC and SSSI) had already been obtained from Natural Resources Wales.

It was explained that carbon is added to the water in the treatment process to absorb chemicals and a polymer is also added to assist the settlement process which is undertaken within six clarifier tanks. Any solids that are unable to settle out are removed using filters. Three clarifier tanks are used at a time with the other three being washed out, the sequence is then reversed. Manganese is removed using sodium hypochlorite while sand filters and UV treatment remove cryptosporidium. Water is then passed through two contact tanks where it is chlorinated. It is at this point that there are Run to Waste discharges back into the Afon Teifi should the water have elevated iron (> 0.2 mg/l) and turbidity (> 0.5 NTU). As explained on site and in separate communications Run to Waste is outside the scope of the existing environmental permit and needs a separate authorisation to discharge. Whilst this national issue (affects approximately 60 WTW's across Wales) is dealt with any Run to Waste discharge from site must be accompanied with a detailed WATPOL.

Filter backwash effluent is pumped to two tanks where the sludge is settled out using polymer. The liquid fraction is then decanted off and goes back into the system. The sludge is thickened further and run through a centrifuge. The remaining thickened sludge is taken off site for land spreading under an Environmental Permit mobile plant deployment. The remaining liquid effluent from the centrifuge is discharged to the Afon Teifi.

At the time of our visit no discharge was being made to the watercourse. This is not a continuous discharge. The discharge flow rate is monitored via an MCERT meter.

Flows:

There was an MCERT meter on site and this was located at the point where the final effluent leaves the thickener and flows down to the discharge point into the Afon Teifi.

Different to Dwr Cymru's Sewage Treatment Works there was no copy of the MCERT calibration certificate kept close to the meter display and due to Covid-19 social distancing guidelines we were unable to enter the site offices to check the onsite copy. The MCERT meter display, shown in Photo 1 below has an in-house calibration renewal date of 04/04/2021 on it so will need to be calibrated soon, if it hasn't already been.



Photo1: MCERT Meter display, in-house calibration due 04/04/2021.

We have checked our system and can see that the MCERT meter had its main external calibration certificate issued on 9 February 2017 and this is valid until 31 January 2022.

Following the visit, a request was made to Dwr Cymru for monitoring data between 16/10/2019 and 16/10/2020 associated with Llechryd WTW Environmental Permit BP0251001.

As specified within the permit the MCERT meter takes 15-minute instantaneous or averaged flows, as litres / second.

Condition 3.1.1, Schedule 3, Table S3.1 states that the maximum rate of discharge should be 20 litres per second. All 15 minute discharge rates are within compliance except one, on 4/11/2019 at 11:30 hours there was a reading of 40.96 litres per second which is double the maximum flow rate, see below:

04/11/2019 11:15	7.42
04/11/2019 11:30	40.96
04/11/2019 11:45	7.42

ACTION: Please investigate and confirm in writing the reason for a 15-minute flow

discharge reading of 40.96 litres per second at 11.30 hours on 04/11/2019. This is over twice the maximum discharge rate of 20 litres per second.

OSM Sample Results:

Following the visit Dwr Cymru have also provided us with OSM sampling data for the same time period, 16/10/2019 to 16/10/2020.

All results logged are in compliance with the parameters listed within the Environmental Permit, BP0251001, apart from a suspended solids failure on 3/12/ 2019. Dwr Cymru have already received a Compliance Assessment Report and associated warning for this failure on 13/02/2020 (CAR_NRW0036218).

We note that according to the WAF001 form an OSM sample was taken on 13 November 2019. There are however no results logged for any of the determinants - pH, Suspended Solids, Iron (total) or Iron (dissolved). This sample has not been logged with Natural Resources Wales as a 'no flow'.

ACTION: Please investigate why there are no results logged against the OSM sample taken on 13 November 2019 and why this sample has not been reported to Natural Resources Wales, even if it is a 'no flow' result. Please respond in writing.

The sampling frequency for sanitary results appeared sufficient with the 12 samples per year frequency outlined with in the permit. Six samples required for non-sanitary.

ENDS

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.