

Compliance Assessment Report CAR_NRW0043138

Permit being assessed: BW5103201

For: LLANTWIT MAJOR WWTW (STW) WICK ROAD, held by DWR CYMRU CYFYNGEDIG

At: LLANTWIT MAJOR WWTW (STW), WICK ROAD, LLANTWIT MAJOR, ,, .

Type of assessment carried out: Audit, Reason: Incident Response (Incident number: 2309773).

On 14/12/2023.

Parts of permit assessed: Relevant conditions

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

Report sent to: CARS Mailbox, CARS Mailbox, on 15/01/2024.

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	Action only (X)	
WQ-C1 - Emissions and monitoring - Emissions to water	Action only (X)	
WQ-B2 - Operations - The site	Action only (X)	
WQ-D2 - Information - Reporting	Action only (X)	
WQ-D2 - Information - Reporting	Action only (X)	
WQ-C1 - Emissions and monitoring - Emissions to water	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	1) The 'exceptional circumstances' report included a table showing all treatment processes being non-operational, including the inlet screens. Can you confirm whether the discharge from the works remained unscreened for the duration of the power outage?	26/01/2024
WQ-C1	2) Once the standby generator was implemented and the works running again was the effluent that was in the treatment works then recirculated to undergo treatment before it was discharged?	26/01/2024
WQ-B2	3) Condition 21 of the permit states "Full standby power generation facilities shall be provided by the consent holder in good working order to enable automatic resumption of power to the UV disinfection system in the event of external power	26/01/2024

Criteria	Action needed	Complete by
	supply failure to the UV disinfection plant" Furthermore, the UV code of practice which forms part of the permit states: "The UV disinfection system and standby power facilities shall be operated as to minimise the frequency and duration of an emergency discharge of sewage effluent which has not been subjected to the required UV dose" Please provide an explanation as to why was there no standby power already in place and available at the works as required under the permit?	
WQ-D2	4) The OPNOT received stated under the Environmental impact section "None expected" please explain the rationale behind this statement given there was no treatment in place at the works.	26/01/2024
WQ-D2	5) Please provide an explanation as to why the OPNOT was not upgraded to an incident and report as such	26/01/2024
WQ-C1	6) The 'exceptional circumstances' report states "Operations took samples of the final effluent leaving the treatment process during the afternoon of 14th December 2023 and the results are shown below: - 14/12/2023 at 16:15 FE x tube = 25 FE TSS = 17mg/l 14/12/2023 at 19:15 FE x tube = 25 FE TSS = 19mg/l The sample results indicate that compliance with the BOD and suspended solids limits would have been met throughout the period when the power supply was off" Please provide the BOD sample results referred to, furthermore any monitoring which was undertaken during the power failure. From the timings supplied, it appears that these samples were taken after the power was restored via the back up generator.	26/01/2024

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 14th of December 2023 NRW received an OPNOT and UVNOT from DCWW for Llantwit Major STW stating "Unplanned power interruption on site due to National Grid issue."

We were subsequently informed that around 09:45, there was a failure in the power supply to the STW. The loss of power resulted in all the treatment processes shutting down. Flow continued to be pumped from the terminal pumping station which led to a prolonged discharge from the works without treatment nor UV disinfection. Dwr Cymru informed NRW that National Grid attended and installed a back-up power generator that restored power to the works at roughly 16:15. UV treatment was not operational between 09:45 and 16:15. Due to a further issue with the PLC, treatment processes were operational manually, then restored automatically at 19:00 once PLC issues were resolved. National Grid back up power was in place until 18th December.

Where UV treatment dose at the works falls below 50% of consented level for >2.4 hours within a 24-hour period, constitutes a potential non-compliance referred to as a 'day failure'. Following notification by phone, on the 20th of December 2023, NRW received an 'exceptional circumstances' report for the UV treatment to set out why Dwr Cymru believe this constitutes emergency conditions.

Following receipt of this report it was clear that the situation should have been upgraded to an incident at the time of the event, the initial report was subsequently added to the NRW's Incident Recording System on 19th December reference number: 2309773. On the 8th of January 2024, a storyboard summarising the incident and a claim for third party responsibility was received from Dwr Cymru.

Prior to finalising a compliance assessment against permit conditions and acceptance or rejection of third party and exceptional circumstances. We have some further questions and to clarify events regarding this incident.

1 - The 'exceptional circumstances' report included a table showing all treatment processes being non-operational, including the inlet screens. Can you confirm whether the discharge from the works remained unscreened for the duration of the power outage?

2 - Once the standby generator was implemented and the works running again was the effluent that was in the treatment works then recirculated to undergo treatment before it was discharged?

3 - Condition 21 of the permit states "Full standby power generation facilities shall be provided by the consent holder in good working order to enable automatic resumption of power to the UV disinfection system in the event of external power supply failure to the UV disinfection plant"

Furthermore, under the UV code of practice which forms part of the permit states: "The UV disinfection system and standby power facilities shall be operated so as to minimise the frequency and duration of an emergency discharge of sewage effluent which has not been

subjected to the required UV dose"

Please provide an explanation as to why was there no standby power already in place and available at the works as required under the permit?

4 – The OPNOT received stated under the Environmental impact section "None expected", please explain the rationale behind this statement given there was no treatment in place at the works.

5 – please provide an explanation as to why was the OPNOT was not upgraded to an incident and reported as such.

6 – The 'exceptional circumstances' report states "Operations took samples of the final effluent leaving the treatment process during the afternoon of 14th December 2023 and the results are shown below: -

14/12/2023 at 16:15	FE x tube = 25	FE TSS = 17mg/l
14/12/2023 at 19:15	FE x tube = 25	FE TSS = 19mg/l

The sample results indicate that compliance with the BOD and suspended solids limits would have been met throughout the period when the power supply was off"

Please provide the BOD sample results referred to, furthermore any monitoring which was undertaken during the power failure. From the timings supplied, it appears that these samples were taken after the power was restored via the back up generator.

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.