

Compliance Assessment Report CAR_NRW0048745

Permit being assessed: BP0045001

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

At: Barley Mow, Lampeter, Ceredigion, SA48 7BY.

Type of assessment carried out: Report/Data Review, Reason: Incident Response (Incident number: 2504635).

On 13/05/2025.

Parts of permit assessed: 3.1.1, 4.3.1 and 4.3.2

NRW Lead Officer: Bethan Lewis.

Report sent to: CARS mailbox, CARS mailbox, on 10/07/2025.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
WQ-C1 - Water Quality - Emissions and monitoring - Emissions to water	Action only (X)	
WQ-C1 - Water Quality - Emissions and monitoring - Emissions to water	Action only (X)	
WQ-D3 - Water Quality - Information - Notifications	Assessed (A)	

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	Continue to monitor final effluent at Lampeter WwTW and periodically empty and clean the final settlement tank lines to the final effluent sample chamber to avoid an accumulation of residue within the pipes.	10/10/2025
WQ-C1	If it is suspected that the quality of final effluent at Lampeter WwTW has deteriorated, please collect a final effluent sample to assess compliance with the permit. If an emission limit is exceeded, you must notify NRW of this.	10/10/2025

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.

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.

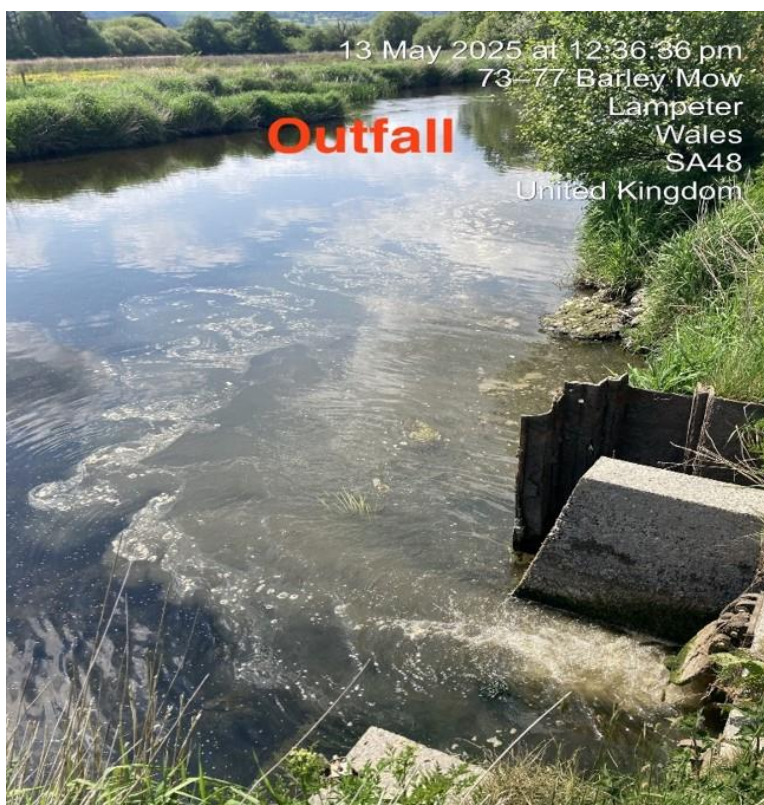
4. Details of our assessment

Summary

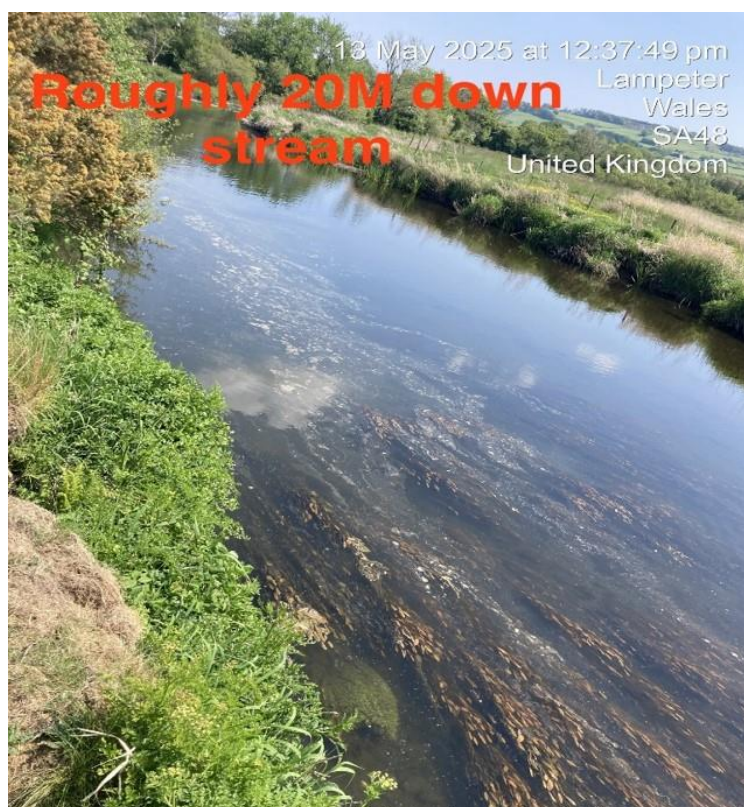
At 14:07 hours on the 13 May 2025, Natural Resources Wales (NRW) received a self-reporting WATPOL (SAP ref: 317332220; WIRS ref: 2504635) from Dŵr Cymru Welsh Water (DCWW) stating that the final effluent quality at Lampeter Wastewater Treatment Works (WwTW) (permit number: BP0045001) had deteriorated due to contamination of the final effluent sample chamber.

Investigations by DCWW concluded that a fault had occurred with a solenoid valve on the inlet screen washwater line. This caused the washwater tank at Lampeter WwTW to empty. The washwater pump ran as designed to refill the washwater tank using final effluent from the final effluent sample chamber. The low-level float switch within the final effluent sample chamber however became stuck internally, causing the final effluent sample chamber to empty completely.

The final effluent sample chamber at Lampeter WwTW is supplied by two submerged lines from the final settlement tank. These pipes remain permanently filled, creating stagnant flow conditions that cause the gradual accumulation of residue within the pipes. With the loss of head pressure, the contents of these pipes flowed into the final effluent sample chamber and out into the Afon Teifi at Lampeter WwTW's outfall. The discharge caused a discoloured plume within the Afon Teifi as shown in photograph 1 below taken by DCWW at 12:36 hours on the 13 May 2025. Photographs 2 and 3 below, also taken by DCWW, show that the plume dissipated 20 metres downstream of the outfall, and disappeared completely 30 metres downstream.



Photograph 1: Discoloured plume at Lampeter WwTW outfall



Photograph 2: Discoloured plume mostly dissipated 20 metres downstream of the Lampeter WwTW outfall



Photograph 3: No discoloured plume visible 30 metres downstream of the Lampeter WwTW outfall

DCWW collected several samples from the Afon Teifi at approximately 12:35 hours on the 13 May 2025. As shown in table 1 below, the analytical results of these samples showed an increase in the concentration of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and ammonia at the Lampeter WwTW outfall compared to upstream. Their concentrations did however return to pre-outfall levels 20 metres downstream of the outfall.

Table 1: Analytical results of samples collected by DCWW from the Afon Teifi at approximately 12:35 hours on the 13 May 2025

	Afon Teifi 5 metres upstream of Lampeter WwTW outfall	Afon Teifi at Lampeter WwTW outfall	Afon Teifi 20 metres downstream of Lampeter WwTW outfall
pH	6.8	6.8	7.2
BOD	<8 mg/L	122 mg/L	<9mg/L
COD	<50 mg/L	1169 mg/L	<50 mg/L
Ammonia	<0.4 mg/L	2.78 mg/L	<0.4 mg/L
Nitrate	1.31 mg/L	<0.2 mg/L	1.43 mg/L
Nitrite	<0.04 mg/L	0.04 mg/L	<0.04 mg/L

Within 1.5 hours of becoming aware of the polluted discharge, DCWW arranged for a tanker to empty and clean the final effluent sample chamber. This stopped further pollution from entering the Afon Teifi. Photograph 4 below, taken by DCWW at the Lampeter WwTW outfall at 15:21 hours on the 13 May 2025 shows no discoloured plume within the watercourse.



Photograph 4: No discoloured plume visible at Lampeter WwTW outfall

DCWW collected further samples from the Afon Teifi at approximately 15:30 hours on the 13 May 2025. The analytical results of these are shown in table 2 below. As can be seen from table 2, the concentration of all parameters at the Lampeter WwTW outfall were comparable with the samples collected upstream and downstream of the outfall. The concentration of BOD, COD and ammonia within the outfall sample were also lower compared to the outfall sample collected earlier in the day (see table 1).

Table 2: Analytical results of samples collected by DCWW from the Afon Teifi at approximately 15:30 hours on the 13 May 2025

	Afon Teifi 5 metres upstream of Lampeter WwTW outfall	Afon Teifi at Lampeter WwTW outfall	Afon Teifi 20 metres downstream of Lampeter WwTW outfall
pH	7.3	7.1	7
BOD	<8 mg/L	<9 mg/L	<8 mg/L
COD	<50 mg/L	<50 mg/L	<50 mg/L
Ammonia	<0.4 mg/L	0.54 mg/L	<0.4 mg/L
Nitrate	1.27 mg/L	2.27 mg/L	1.35 mg/L
Nitrite	<0.04 mg/L	0.14 mg/L	<0.04 mg/L

No final effluent sample was collected from Lampeter WwTW at the time of the polluted discharge. Final effluent samples were however collected by DCWW before and after the incident on the 13 and 14 May 2025 respectively. The results of these samples are provided in table 3 below. As shown in table 3, the concentration of ammonia and orthophosphate in both samples were comparable before and after the incident demonstrating that final effluent quality was impacted for a short duration only.

Table 3: Final effluent sample results from 13 and 14 May 2025

	Final effluent sample collected prior to the incident on 13 May 2025	Final effluent sample collected on 14 May 2025
Ammonia (mg/L)	0.54	0.29
Orthophosphate (mg/L)	2.6	2.6

Completed actions

In response to the above incident, DCWW completed the following actions to reduce the likelihood of the incident reoccurring at Lampeter WwTW:

- 14 May 2025: Faulty solenoid was replaced;
- 15 May 2025: Float switch within the final effluent sample chamber was replaced;
- 19 May 2025: Final settlement tank lines to the final effluent sample chamber were emptied and jetted to remove remaining residue.

It is advised that DCWW continue to monitor final effluent at Lampeter WwTW and periodically empty and clean the final settlement tank lines to the final effluent sample

chamber to avoid an accumulation of residue within the pipes. A deadline of the **10 October 2025** has been assigned for this under section 2 above, however it is expected that DCWW continue to monitor and periodically empty and clean the lines beyond this date.

Permit Compliance

The above incident had a short-term impact on water quality within the Afon Teifi for up to 30 metres downstream of Lampeter WwTW's outfall, however it is not believed that the incident resulted in a breach of permit. DCWW complied with the notification requirements of conditions 4.3.1 and 4.3.2, and as no final effluent samples were collected at the time of the incident, no limits given in schedule 3 table S3.1a are known to have been exceeded. It is important to highlight however that had a final effluent sample been collected at the time of the incident, there is a strong possibility that the sample would have exceeded one or more of the limits given in schedule 3 table S3.1a. If it is suspected that the quality of the final effluent at Lampeter WwTW has deteriorated, NRW ask DCWW to collect a final effluent sample in future to assess compliance with the permit. If an emission limit in schedule 3 table S3.1 is found to have been exceeded, DCWW must notify NRW of this. A deadline of the **10 October 2025** has been assigned for this under section 2 above, however it is expected that DCWW continue to do this indefinitely.

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) order 2012.

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.