

## Compliance Assessment Report CAR\_NRW0051405

**Permit being assessed:** AG0009101

**For:** Cowbridge Wastewater Treatment Works, **held by:** DWR CYMRU CYFYNGEDIG

**At:** Lake Farm, St Athan Road, Cowbridge, Vale of Glamorgan, CF71 7HY.

**Type of assessment carried out:** Site Inspection,

**Reason:** Routine.

**On** 30/03/2026, between 09:50 and 10:50.

**Parts of permit assessed:** Relevant conditions

**NRW Lead Officer:** Charlotte Rhodes.

**Report sent to:** DCWW CARS Mailbox, DCWW CARS Mailbox, on 14/04/2026.

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

Part of permitted activity assessed (criteria)	Assessment result	Non-compliant permit condition
WQ-B1 - Water Quality - Operations - Permitted activities	Assessed (A)	
WQ-B3 - Water Quality - Operations - Operating techniques	Assessed (A)	
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-C4 - Water Quality - Emissions and monitoring - Monitoring	C4 No impact	3.3.4

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	1. Confirm if there is an AMP scheme to review the filter bed treatment phase to address vegetation growth and if so, expected delivery timeframe.	15/06/2026
WQ-A1	2. Review the brushes on the rotating arms of both final settlement tanks and adjust as necessary to ensure effective operation.	05/05/2026

Criteria	Action needed	Complete by
WQ-C4	3. Investigate long-term solutions to facilitating bypass of the Magflow meter for cleaning and maintenance and provide expected timeframes for completion. Continue to submit OPNOTs as necessary in the meantime.	15/06/2026

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

#### Site report

On 30<sup>th</sup> March 2026 Officers C RHODES and L HANDLEY visited at Cowbridge Wastewater Treatment Works (WwTW) for a routine inspection of permit reference **AG0009101**. Officers were accompanied by the Catchment Performance Manager and Pollution Prevention Technician. Weather at the time of visit was dry, with rain the previous evening.

#### **Inlet**

The inlet was receiving heavy flows from Brookfield Park Sewage Pumping Station (SPS) and the foul pumps at Llanblethian SPS at the time of inspection, though inlet screens were free of rag and debris.



Left: Inlet pumps. Right: Inlet screens.

The MCERTS Full Flow to Treatment/Flow Passed Forward (FFT/FPF) Magflow meter is located after the inlet and balancing tank, and was reading 35.5 litres per second (l/s) at the time; the overflow setting for this site is 48.1 l/s. The certification is within date and next due in 2029.

Previous inspections raised concerns with inability to bypass the meter for cleaning and maintenance (see CAR\_NRW0046799); this remains unresolved but the present arrangement is still to overpump flows into the distribution to primary tanks, taking around 1 hour and requiring notification via OPNOT. **Action to investigate long-term solutions and provide expected timeframes for completion.**



*Magflow MCERTS meter*

### **Primary treatment**

There are two primary settlement tanks at site: both seemed to be in good working order with auto-de-sludge in place and minimal scum accumulation. Pictured below.



### Storm storage and outfall

At the time of inspection the site was not discharging to storm, with flows being returned to treatment to allow the storm tanks to recover/drain down. This was being manually controlled to ensure that ammonia levels from the storm return did not overload treatment. All four storm tanks had thick sludge blankets but were much lower than previous inspection observations – two pictured below.



The EMDS (monitoring of flows to storm tanks) was in place and labelled in line with Condition 3.3.1(a), following previous non-compliance noted in CAR\_NRW0046799, with the EDME (storm discharge to environment) remaining at the edge of the furthest left storm tank when viewed from the head of the works.

At the storm outfall to River Thaw, no rag or solids were visible and there was no discharge happening at the time; however, there was a build up of sediment which is unusual for the site. Catchment Performance Manager agreed to monitor this to ensure that sediment does not build up potentially compromising the outfall function. Further downstream at the entrance road to the site, the river was running clear and appeared in good visual health.



### Secondary treatment

The gravity filter beds appeared to be rotating unimpeded, yet there is still significant growth of vegetation on the surface of all four filter beds as noted in previous inspections (namely CAR\_NRW0046799). It was discussed that there may be an AMP scheme to review the filter bed drivers to mitigate this, but in the meantime they are hot pressure cleaned as needed. This has not been done recently though as the relevant operative has reportedly been off sick. **Action to confirm if this is captured within an AMP scheme and if so, expected delivery timeframe.**



### Final settlement and tertiary treatment

Flows are settled in the final settlement tanks (FSTs) before being pumped to the pile cloth media filter (MECANA unit) for tertiary treatment.

Both treatments appeared to be functioning as designed with no significant sludge build-up, though

it was noted that the rotating brushes for the shoulder tiles on both FSTs did not appear to be functional. This was leaving some fungus to accumulate on the edging tiles, as pictured below. **Action to review and adjust as necessary to prevent fungus build up.**



51.45288, -3.44552, 75.2m  
30/03/2026 10:30:22

*A tank of the Mecana pile cloth filter.*



51.45339, -3.44497, 76.4m  
30/03/2026 10:36:06



51.45334, -3.44494, 72.9m  
30/03/2026 10:35:49

Left: FST 1 with some fungus build up on tile lip. Right: FST 1 tile brushes in action.



Left: FST 2 with some fungus build up on the tiles. Right: FST 2 ineffective brushes in action.

The final effluent outfall was discharging at the time of visit; effluent appeared to be slightly greyish in colour compared to the receiving watercourse but no noticeable odour and it was dispersing quickly into the main waterbody (River Thaw) - pictured below. The local area is known to have had greyish silt previously so the colouring noted is likely linked to local geology and flashy river characteristics in the area rather than effluent quality.



### **Assessment against permit conditions**

**Condition 2.2.1** – *The only activities authorised by the permit are the activities specified in schedule 1 table S1.1 [discharge of secondary treated sewage effluent with nutrient removal and settled storm sewage].*

Both final effluent and storm effluent remain discharging from their permitted locations and thus compliant. This is reflected in the scoring as B1.

**Condition 2.3.2** – *For the discharges specified in table S3.3 [settled storm sewage]:*

*(a) shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated [48.1 l/s] due to **rainfall and/or snow melt**;*

*(b) off-line storm storage must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward is equal to or greater than the overflow setting indicated due to **rainfall and/or snow melt** and shall be emptied and its contents returned to the continuation flow as soon as reasonably practicable. The minimum off-line storm storage required is specified in table 13.3 [633m<sup>3</sup>].*

Previous inspections have found this to be non-compliant but during this one, no non-compliant discharges were witnessed.

**Condition 3.3.1(a)** – *The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:*

*a. Point source emissions specified in tables S3.1 and S3.4 [storm effluent sampling, event*

*duration monitoring, flow passed forward monitoring, overflow operation (into storm storage) monitoring]*

At present, the site was found to be compliant with this condition.

**Condition 3.3.3** – *Monitoring equipment, techniques, personnel and organisations employed for the emission monitoring programme and the environmental or other monitoring specified in condition 3.3.1, shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.*

The site was found to be compliant with this condition.

**Condition 3.3.4** – *Accessible monitoring points shall be provided and **maintained** to enable 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 [**MCERTS continuous flow monitoring**] and shown marked on the site plan in schedule 7.*

Although there is an operational workaround for cleaning and maintenance of the Magflow, this is not a long-term solution. The lack of bypass available is therefore recorded as a Category 4 non-compliance – see Actions.

#### **Actions / further comments**

In conclusion, we presently find the site to be **non-compliant** with Condition 3.3.4, returning to compliance on other conditions of note in previous inspections.

The following actions are therefore given:

1. Confirm if there is an AMP scheme to review the filter bed treatment phase to address vegetation growth and if so, expected delivery timeframe. **Action only, deadline 15/06/2026.**
2. Review the brushes on the rotating arms of both final settlement tanks and adjust as necessary to ensure effective operation. **Action only, Condition 1.1, deadline 05/05/2026** due to already being discussed during the inspection.
3. Investigate long-term solutions to facilitating bypass of the Magflow meter for cleaning and maintenance and provide expected timeframes for completion. Continue to submit OPNOTs as necessary in the meantime. **C4, Condition 3.3.4, deadline 15/06/2026.**

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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

**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 Monitoring
- WQ-C5 Installation of monitoring boreholes

**WQ D: Information**

- WQ-D1 Records
- WQ-D2 Reporting
- WQ-D3 Notifications

**Enforcement response**

Any non-compliance with a permit condition 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 twenty working days to let you know if we agree to your request.

**Disputing the Content of this Compliance Assessment Report Form**

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

**Concerns Not Related to the Content of this Compliance Assessment Report Form**

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk)

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** [ask@ombudsman.wales](mailto: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.