

## Compliance Assessment Report CAR\_NRW0039638

**Permit being assessed:** AN0010101

For: COSLECH STW PETERSTON SUPER ELY, held by DWR CYMRU CYFYNGEDIG  
At: COSTLECH STW, PETERSTON SUPER ELY ROAD, GROESFAEN, LLANTRISANT, CF72 8QS.

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

On 28/02/2022, between 10:00 and 14:00.

Parts of permit assessed: Conditions 1, 3, 4-12, 14-15, 19, 20, 22, 23

**NRW Lead Officer:** Charlotte Rhodes, accompanied by: Hannah Jenkins.

**Report sent to:** Rob Short, Site Performance Manager, on 05/05/2022.

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

| Part of permitted activity assessed (criteria) | Assessment result | Permit condition |
|------------------------------------------------|-------------------|------------------|
| WQ-B1 - Operations - Permitted activities      | 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-B1    | During the time of inspection it was noted that there were high solids in the Southernmost final tank but appeared to be retained by the scum boards. We were informed on site that this could be rectified by flow management to said tank. Please ensure that flows are pro-actively managed to avoid this as this could result in environmental impact or permit non-compliance. At the time of inspection, final effluent looked clear and of good quality and therefore did not result in a non-compliance on this occasion. | 03/06/2022  |

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

The purpose of the site visit was to undertake an OSM site audit. Officers were accompanied by Matthew

Roberts, Lee Banks, Paul Stannard, Rob Short and Chris Edwards of Dwr Cymru throughout the inspection. The weather was overcast with intermittent rain.

Coslech is a large sewage treatment works, the PE for the catchment is 55958, the permit limits are: 20 mg/l BOD, 30 mg/l suspended solids, 8 mg/l ammoniacal nitrogen.

### Inlet

Site was inspected from the inlet to the tertiary tanks, outfall was deemed not accessible at the time of visit (covered at the end of this report). The following was observed:

- 4 pumps from the inlet well to the inlet (duty, assist x2, standby)
- 2 storm pumps, standby currently out of service since approximately a week prior to this visit. No isolation/penstock valve available hence repair is challenging with regards to H&S and replacement parts for the valve rig are on order due to corrosion of existing.
- Storm spills (EDM) is measured after the storm tanks, discussed further in CAR\_NRW0039639.

### Preliminary treatment

Skips and a compactor chute were present on site, for which the material is sent to Bristol for further processing or disposal, it was unknown which. Grit is collected in a separate skip, settled out via serpentine channel created by baffling in chamber.

The level of this channel/chamber was particularly high during the visit, almost up to the walkway. Officers were assured that the flow was still being screened and not overtopping them as a level sensor was monitoring, however a recent issue with the screen had led to the higher flows and a backlog.

### Biological treatment

There are 2 oxidation ditches housing bacteria and surface aerators which drive DO and maintain velocity to keep suspension. Due to no primary treatment, the strength of the inflow is greater than usual.

Reactivated sludge is used in this part of the process. DO monitors showed 2.3mg/l. The two lanes can be isolated individually, however access is not often required.

**Ferric dosing occurs after this stage, at the weir point to the final tanks/FE sample point.**



### Final treatment

There are 3 final settlement tanks. Sludge 'judge' assessment is done manually every day to assess the sludge blanket, SSVI every week. Monitors were offline at the time of visit due to previous unreliability of readings.

2 centrifuges are used for sludge collection and reuse, collected into 3 skips which are stored undercover. Each skip takes around 20 hours to fill and can hold 17-18 tonnes due to being fed from overhead. The sludge is then mixed with a polymer coagulant and skips are taken to Cardiff AD plant when sludge is no longer viable. It is noted that waste sorting was very efficient and benefitted from being undercover.

Officers then left site to visit Pendoylan and Peterston Ely STWs, returning around 13.35.

### Returned 13.35 to Coslech and inspected FE tanks and sample points:

Final Effluent sample point was clearly labelled, situated near to the final tanks, and an automatic sampling station for Urban Wastewater Treatment Directive was present but offline.



The furthest South of the 3 final tanks had some of its sludge blanket present at the surface (see photos below) but appeared to be retained by the scum boards, whereas the other two tanks were clear as expected and not over topping. DCWW Matthew Roberts notified the site operator of this, Rob Short, to adjust the flows being directed to each tank and rectify.

It was also noted that the sludge being held at the centre of each tank/in the hoppers was at a high level and appeared very close to the lip in some places; this was apparently due to foam content of the sludge and considered normal operation.



### Outfall

The outfall was not visited on the day of inspection as it is considered by DCWW to not be very accessible due to land ownership and H&S concerns and is reportedly only checked every few years. See recommendation below.

Officer Rhodes visited the outfall separately on 05/04/2022 which was found at 14:47 to be running continuously with a relatively fast flow, appearing clear but it was difficult to tell due to moss and algae present on the concrete. The outfall was also half submerged. A slight odour was present and some small rag/waste visible, however the banks were strewn with litter all the way along, presumed due to previous high river flows. No sewage fungus was visible at the time of inspection.

**Recommendations:**

1. Consider a regular inspection of the outfall as part of business as usual, including an access agreement with the relevant landowner/s.

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](mailto: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](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.