

Compliance Assessment Report CAR_NRW0043024

Permit being assessed: AF4027401

For: TIRYBERTH COUNCIL DEPOT NEW ROAD TI, held by CAERPHILLY COUNTY BOROUGH COUNCIL

At: TIRYBERTH COUNCIL DEPOT, NEW ROAD, TIRYBERTH, HENGOED, .

Type of assessment carried out: Site Inspection, Reason: Routine.

On 13/12/2023, between 12:50 and 14:55.

Parts of permit assessed: Permit compliance

NRW Lead Officer: Elis Nuttall.

Report sent to: Ceri Davis, District Environmental Health Officer, Caerphilly County Borough Council, on 08/02/2024.

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	C3 Minor	PERMIT CONDITION III - Volume or Rate of Discharge of Effluent from Land or Premises. 7.274m ³ per day.
WQ-A1 - Management - General management	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	Inform NRW on if/when the improvements opportunities identified by Arcadis will be scheduled for completion.	19/03/2024
WQ-A1	Access to the sewage treatment system was very limited at the time of the visit, having to access the compound via a small side door. Please ensure that the compound is accessible from the primary door at the front of the building to facilitate efficient and safe access for future maintenance and assessments.	29/02/2024

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.

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 Visit Report

I (NRW Environment Officer, Elis Nuttall) attended Caerphilly County Borough Council's Tiryberth Council Depot (permit reference number EPR-AF4027401) at New Road, Tir-y-Berth, Hengoed CF82 8AU, Caerphilly for a permit compliance visit. I arrived on site at 12:50 on the 13/12/2023 where I met with CCBC staff. The weather was dry and clear during the visit.

Site Observations

This permit regulates the discharge of treated sewage effluent from CCBC's Tiryberth Depot wastewater treatment system (bio-disc). It is a legacy permit initially issued to Rhymney Valley District Council in 1978. The discharge limit consents are as follows:

- Total suspended solids (TSS): 30 mg/l
- Biochemical oxygen demand (BOD): 20 mg/l
- pH: 5 - 9
- Discharge rate: 7.274m³ per day

It is noted that the permit list a date of expiration (Of period specified under S-5(2) of 1961 Act) of 26/08/1980.

Site Infrastructure

An office meeting was conducted on arrival to discuss the ongoing compliance works at this site. It was confirmed that NRW officer Luke Burton was the last to visit site in a regulatory capacity on 16/07/2021. A copy of the CAR form for this previous visit was available for review during the visit to assess the progress made since it's issue.

I confirmed with CCBC staff that the wastewater treatment system is a bio-disc unit, but they were unsure on the make, model or capacity. This system serves all foul/wastewater from site but also takes some of the surface water from one section of the site around buildings B8, B9, B10 and B11. An updated site plan was provided, on which CCBC staff highlighted the area in question as seen in Figure 1. CCBC staff are aware that this surface water should not be discharging to the treatment system and have been given actions from the previous visit to redirect surface water to an appropriate drainage system and not to discharge to the foul water system. At the time of the visit it was noted that these surface water flows still discharge to the foul drainage system and subsequently are processed through the sewage treatment system.

It was made clear that the runoff from the car washing facilities on site (used to maintain CCBC's fleet vehicles only) does not discharge via the sewage treatment system but via a surface water line. It was stated that an interceptor was in use. This can also be seen in Figure 1.

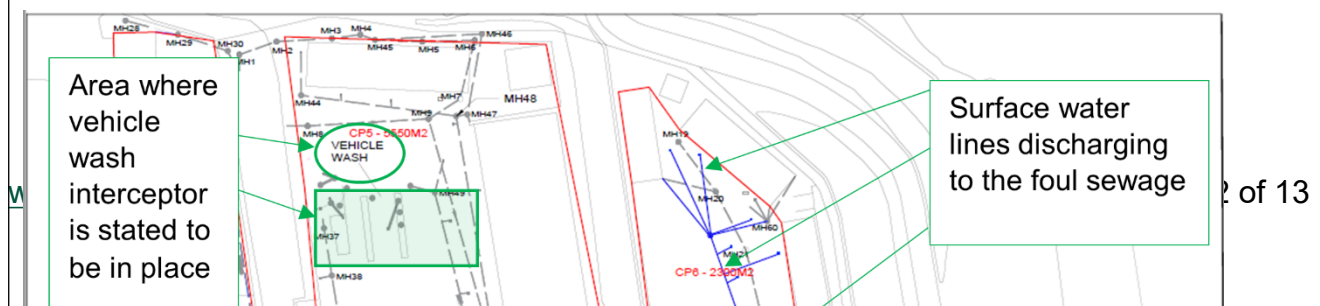


Figure 1 – Tiryberth Council Depot site plan provided by CCBC on 13/12/2023.



Figure 2 – Site visit photo: The secure compound where the treatment system is located.

The sewage treatment system itself is located within a secure compound off site at ST1530296949 as seen in Figure 2. The discharge from the system was previously monitored/sampled monthly but is now undertaken quarterly.

It was stated the discharge composition has always been within consent limits, but the discharge volume has consistently been higher than the contested limits due to the ingress of surface water. There is currently no flow monitoring being undertaken at the site. The system is checked daily to ensure it is operational and working as designed with a yearly service undertaken by Egan Waste. It is noted that the permit does not contain any sampling, servicing or maintenance conditions.



Figure 3 – Site visit photo: The final treated effluent as seen from the sampling point chamber before it is discharged to the Rhymney River.

The sampling point was located at ST1530796941 and was fully accessible. CCBC staff lifted the manhole cover so that flow could be observed. The flow itself appeared clear with no particulate matter or untreated effluent present. The discharge rate was very high at the time of the visit, with CCBC staff noting that it is the highest they have ever seen it. This is evidenced in Figure 3.

While on site I took a water quality sample of the final treated effluent from the monitoring point to check if the increased flow due to surface water ingress has had a significant

impact of the quality of the discharge. The sample taken can be seen in Figure 4. Visually the sample was clear with very minimal suspended solids or visual sewage material. The sample results as seen in Table 1 below show that the discharge is within compliance on all parameters outlined in the permit conditions.



Figure 4 – Site visit photo: Water quality sample taken during the site visit.

Parameter	Permit limit	Sample results
Biochemical oxygen demand (BOD)	20 mg/l	4 mg/l
Chemical oxygen demand (COD) as O ₂	None listed	32.5 mg/l
Ammonia(N)	None listed	1.98 mg/l
N Organic	None listed	Not assessed
N Oxidised	None listed	13.7 mg/l
Nitrate-N	None listed	13.344 mg/l
Nitrite-N	None listed	0.356 mg/l
Total suspended solids (TSS)	30 mg/l	5 mg/l
0172 / Chloride Ion	None listed	63.8 mg/l
0180 / Orthophosphat	None listed	1.79 mg/l

3683 / N Inorganic	None listed	15.68 mg/l
pH	5 - 9	Not assessed
Discharge rate	7.274m ³ per day	Not sampled

Table 1 – Sample results compared to permit limits (if available).

I requested that a record of the site's sampling data be sent by CCBC staff so that a longer term data audit can be undertaken.

The sewage treatment system itself was briefly checked and appeared to be running and working effectively.



Figure 5 – Site visit photo: The discharge point as observed during the visit.

The discharge point to the Rhymney River was checked and was observed to be clear of any pollution or evidence of sewage material. It is noted that the outfall is also the discharge point of a DCWW surface water line, hence the visibly increased flow apparent, as seen in Figure 5. The river was also clear of any pollution, as seen in Figure 6.



Figure 6 – Site visit photo: Conditions of the Rhymney River downstream of the discharge point during the visit.

The actions outlined below were noted in a previous compliance form. as part of the site's ongoing efforts to bring the drainage system into compliance. During this site visit CCBC gave updates which are highlighted in **BOLD**.

Action 1: Investigate all possible sources of flow entering the site's foul sewer system and remove those which should not be entering it and are contributing to the non-permitted flow received by the wastewater treatment system.

- **CCBC have investigated the surface water lines and confirmed that those around buildings B8, B9, B10 and B11 are discharging via the foul sewage system. However, this is ongoing with no remediation undertaken as of 13/12/2023.**

Action 2: Investigate if building roofs, car parks and highway drains drain to foul sewer or not. If they do redirect them to surface water drains / storm drains, or, to a 'sustainable drainage system' (SUDS) within an agreed timescale.

- **As above, investigations have taken place but no further actions as of 13/12/23.**

Action 3: For the car park, either install a SUDS system to capture rain water / snow melt from your car park drains, or, decrease the size of the car park, or, install an interceptor to capture rain water / snow melt before discharging it to surface water / storm water sewer.

- **No action as of 13/12/23.**

Action 4: For the goods vehicle / refuse vehicle area, commission a new survey to establish if an interceptor is present for this area and ensure it connects to a surface water / storm water sewer, or, if it does not have an interceptor install a full retention separator with an alarm which discharges to surface water / storm water sewer.

- **CCBC commissioned Lanes Group plc to undertake a drainage survey which**

was completed on 24/01/2022. This confirmed the presence of an interceptor on site and that it does discharge to a surface water line. This report was requested to be sent to me by CCBC. No actions have been undertaken in response to the survey as of 13.12.23.

Action 5: We ask that you either, in order of preference, install a new vehicle washing that recycles washing water and creates no discharges, or, direct the effluent from the vehicle washing area to sewerage undertaker owned foul sewer (with consent), or, direct the effluent from the vehicle washing area to foul sewer leading to the bio-disk, providing that effluent first flows through a suitable full retention oil separator with an alarm first, within an agreed timescale.

- **CCBC commissioned an optioneering report to be undertaken by Arcadis to identify the feasibility and options available to address the drainage on site. This was completed on 27/06/23. The preferred option outlined in this report is the installation of a water recycling system for the vehicle washdown area. No actions have been taken to complete this work as of 13.12.23.**
- **It was noted that cleaning products are used as part of the vehicle wash down operations. I have requested the COSHH safety data sheets be provided for these products for assessment.**

Action 6: Please provide in writing for Natural Resources Wales approval, a timetabled action plan for completion of all the above actions within 1 month of this Compliance Assessment Report. Natural Resources Wales will then monitor the progression against the agreed timescales. Please aim to complete all actions within 6 months.

- **It was stated that CCBC know what actions are needed and have a rough estimation of costs for the work but stated no action plan was put in place. The justification for this was that the timescale set to complete the above actions was unfeasible. It was noted that due to cost benefit analysis, if the investment to remedy the site infrastructure is deemed unfeasible by CCBC, the site may be decommissioned.**

Action 7: Following your investigation and changes within the agreed timescales. Please provide in writing for Natural Resources Wales comment, a monitoring plan which establishes the flow of foul wastewater entering your treatment system, over a statistically significant period of time. Following comment, conduct that monitoring and report back your findings to Natural Resources Wales to discuss next steps in respect of your permit.

- **Monitoring data has been recorded and kept by CCBC. These were requested to be sent to myself, which CCBC did during the site discussion. A data audit will be undertaken to assess compliance. However, no written monitoring plan is in place. As noted above, the site's discharge is sampled quarterly by ALS Environmental Ltd.**

A brief discussion on actions were held after addressing the above. It was noted that I will have to discuss the next steps for the site improvement plan with senior officers before setting actions.

I left site at 14:55.

Breaches of permit condition:

1. PERMIT CONDITION III – Volume or Rate of Discharge of Effluent from Land or Premises.

Condition limit is set at 7.274m³ per day.

Justification: From visual observations and the understanding that surface water discharges are being made via the sewage treatment system it is clear that the discharge rate is greater than the limit outline in the permit.

Actions required

1. Inform NRW on if/when the improvements opportunities identified by Arcadis will be scheduled for completion.

Deadline: 19/03/2024

2. Provide a copy of the updated drainage survey and site drainage plan

Deadline: Completed

3. Provide a record of recent flow rate data

Deadline: Completed

4. Provide a record of composition monitoring data

Deadline: Completed

5. Provide information on the specifications on system, including capacity and treatment efficiency

Deadline: Completed

6. Provide a copy of maintenance records and evidence of works undertaken

Deadline: Completed

7. Provide an example of the daily checks undertaken on the system

Deadline: Completed

8. Provide a copy of the site optioneering report

Deadline: Completed

9. Provide information on the operational schedule of the car wash as well as safety data sheets for all products used

Deadline: Completed

Other advisory comments

1. Access to the sewage treatment system was very limited at the time of the visit, having to access the compound via a small side door. Please ensure that the compound is accessible from the primary door at the front of the building to facilitate efficient and safe access for future maintenance and assessments.

Contact details:

If you have any queries regarding this CAR form or to provide an update on any actions above, please contact me using the following details: Elis Nuttall, Environment Officer, elis.nuttall@naturalresourceswales.gov.uk, 03000654651/07904606156.

Thank you,
Elis Nuttall.

If we do not receive the information requested within specified deadline and have not been informed as to why there is a delay then we may serve a Regulation 60 Notice requiring the information under Environmental Permitting (England and Wales) Regulations 2016.

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.