Compliance Assessment Report CAR_NRW0053007

Permit being assessed: AN0295601

For: CEFN CARNAU UCHAF THORNHILL, **held by:** Elysium Healthcare No.3 Limited

At: CEFN CARNAU UCHAF, THORNHILL, CAERPHILLY MOUNTAIN, ,, CF82 1LY.

Type of assessment carried out: Site Inspection,

Reason: Routine.

On 17/09/2026, between 10:05 and 11:19.

Parts of permit assessed: Site infrastructure and permitted activities

NRW Lead Officer: Elis Nuttall.

Report sent to: George Reilly, Maintenance & Health and Safety Lead , on 21/09/2026.

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

Part of permitted activity assessed (criteria)	Assessment result	Non-compliant permit condition
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-D1 - Water Quality - Information - Records	Action only (X)	
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-B4 - Water Quality - Operations - Improvement programme	Action only (X)	
WQ-A1 - Water Quality - 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-A1	Undertake a full inspection and service of the system to ensure it is treating effluent effectively to the permitted standards.	21/11/2026
WQ-D1	Provide waste transfer notes for both the recent and forthcoming cleans of the system.	21/10/2026
WQ-A1	Remove all build up of sediments on the ledges within the	21/10/2026

Criteria	Action needed	Complete by
	effluent chambers to ensure it does not adversely impact the treatment or effluent quality.	
WQ-B4	Provide the contact details of the Estates Team so that NRW can discuss the options to bring the Therapy Centre's effluent management under appropriate regulation.	21/10/2026
WQ-A1	Remove the excess sediment and staining from the sample point pipework during the next clean on site.	21/10/2026

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 Inspection Report

This report details the site inspection made by Natural Resources Wales (NRW) on the 17/09/2025 to Cefn Carnau (Elysium Healthcare) permit reference number EPR-AN029560.

I (NRW Environment Officer Elis Nuttall) attended Elysium Healthcare, Cefn Carnau Ln, Caerphilly for a water quality permit compliance inspection of the package sewage treatment plant at 10:05 where I met with the site's Maintenance & Health and Safety Lead (GR). The weather was overcast, wet but not raining during the visit.

General Observations

The site is a rehabilitation centre with capacity for 22 clients/beds and staff numbers of ~50 total. The sewage discharges are served by a package sewage treatment plant which discharges to an unnamed pond and then to a tributary of the Scouring Brook.

The system is consented to discharge a maximum of 17m³/d of secondary treated sewage effluent. There are no conditions that stipulate tertiary treatment is required. A flow measurement structure is required to enable daily discharges to be measured. The discharge composition shall not contain more than:

- 20mg/l of biochemical oxygen demand (BOD)
- 30mg/l of total suspended solids (TSS)
- 15mg/l of ammoniacal nitrogen (N).

The site was operational at the time of the visit

Initial Discussion

As this was a return visit by myself I was aware of the drainage arrangements for site so no in-depth discussions were held prior to the infrastructure inspection. GR confirmed that other than new pipework connection on site facilities to the treatment system no major changes have been made to the site. Client and staff number remain consistent with past inspections. No further discussion as held and we continued to inspect the site infrastructure.

Site Infrastructure Inspection

Prior to conducting the inspection, I noticed a prominent sulphurous odour around the treatment system. When I raised this with GR they noted they are aware of the issue and are working on resolving the issue for the benefit of clients who reside on site and for staff. This odour could be an indicator of ineffective treatment and excessive bacteria so I advise a service of the system is undertaken to assess its effectiveness. This is actioned below.

The treatment system was observed with no signs of surcharging or debris present as was the case on a previous visit. Please see Figure 1 for the conditions as observed during the visit. GR noted that the new pipework has reduced the instances of blockages and the requirement of manual removal of debris. They also claimed they had waste transfer notes available for the last clean undertaken ~3 month prior to this visit. This cleaning regime is on a 3 month recurring cycle so GR stated that another clean is due imminently. I requested that the transfer notes for both cleans are sent to me via email once available as evidence of appropriate management. This is actioned below.



Figure 1 – The above ground infrastructure of the PTP as observed during the inspection.

The chambers of the system were lifted in sequence so that the below ground infrastructure could be assessed. The observations of each are seen below, with Figure 2 providing evidence to support each observation.

- Chamber 1 – Primary settlement chamber: We were unable to lift the chamber lid due to the lack of appropriate lifting equipment. As such an assessment could not be made at the time of the visit. I requested that as soon as practicably possible GR should send a photo of the internals of this chamber so that a remote assessment could be made.

- Chamber 2 – Aeration: The integrity of the chamber walls look good, with good

aeration and movement of the effluent within. There was no excessive build up of material or odours present. There is some build up of sediments on the ledges within the chamber but this appears to be mud and not sewage material, but could impact the effluent treatment and quality if excessive amounts enter the chambers. This was consistent throughout the chambers. An action to clear this sediment from every chamber is listed below.

- Chamber 3 – Aeration: As above, no concerns but sediment build up should be addressed.
- Chamber 4 – Filtration: The chamber walls are in a good condition with no cracks or defects present. The filter baskets were clean, with GR noting that they were cleaned individually during the last clean and jetting operation. Again, excessive sediments should be removed.
- Chamber 5 – Final Effluent: The final effluent chamber and discharge pipe also had sediment build up within them. As per the previously noted action this should be removed as a priority during the next clean. The effluent itself appeared clean with no perceivable suspended solids present and there was no odour at the time of the visit.

We then proceeded to inspect the sample point.



Figure 2 – The PTP chambers as observed during the inspection.

From top to bottom, left to right: Chamber 2, 3,4 & 5.

On a previous site inspection, there was some discrepancy between the consented and observed location of the site's sample point. While it is consented to be located at ST16168496, the observed/usable sample point is located at ST1614884980. This is seen in Figure 3. During this inspection, when queried on if any other points have been used as a sample point, GR noted there are several other inspection chambers present on site which could have or can be used as a sample point. However, when we attempted to lift them to inspect their internal use and structures, we were unable to access them due to a lack of appropriate lifting equipment. As a result, I was happy to accept the previously

observed sample point at ST1614884980 as the official sample point for the site.

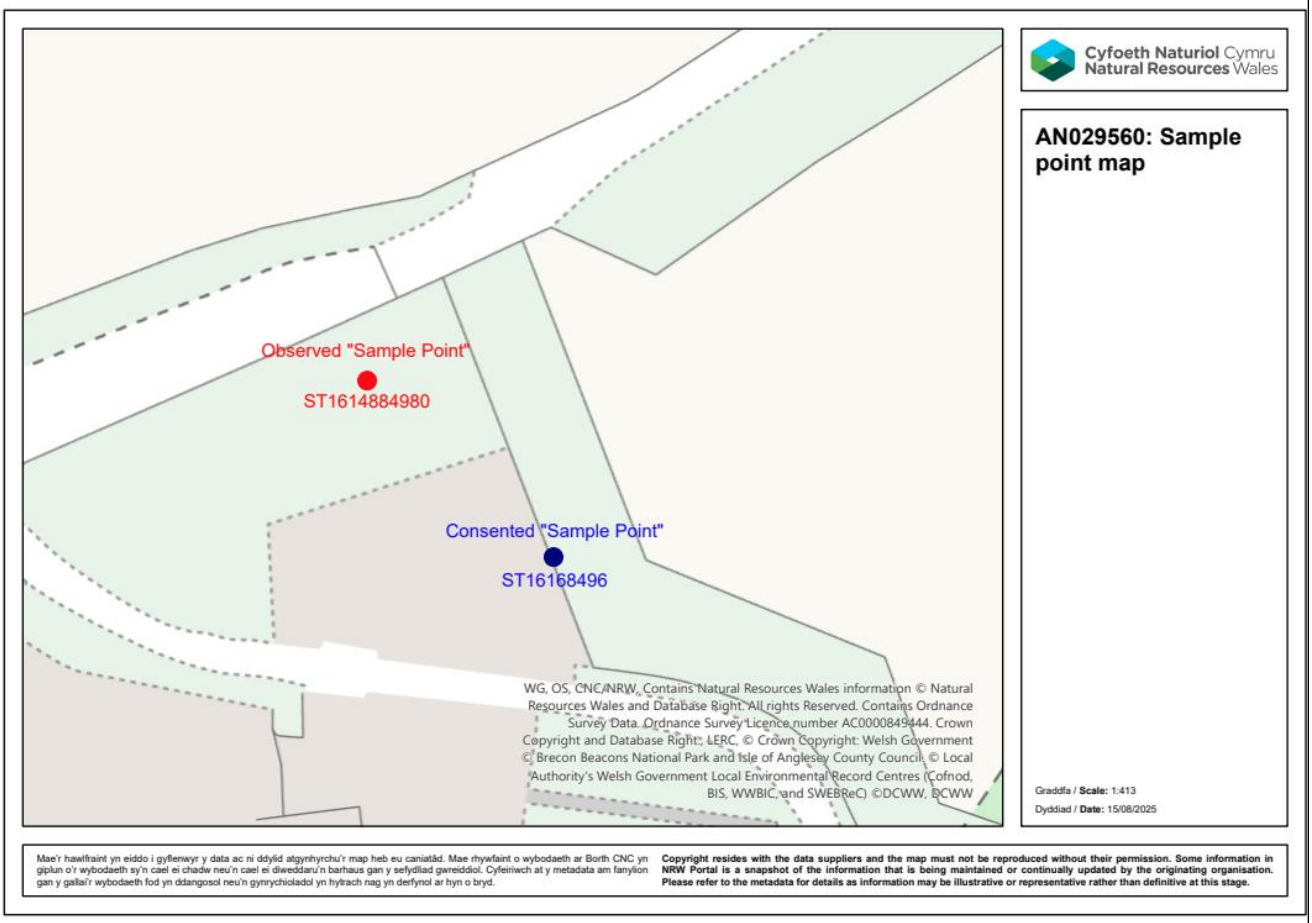


Figure 3 – The discrepancy between the listed and observed sample point on site.

On a previous inspection, it was observed that another PTP treatment system was in place on site adjacent to the sample point at ~ST1615184976. This was confirmed by GR to be the old, defunct system that was isolated and no longer in use, as is noted in CAR_NRW0049065 dated 07/08/2025. While I issued an advisory action to explore the removal of defunct infrastructure from site I had no concerns at that time and was satisfied that it did not pose a risk.

However, while passing this system on our way to the sample point during this inspection, I noted that the pump was running. On request, GR lifted the lid of this chamber and I observed that the primary effluent tank was holding ~50-100mm of effluent, evidenced in Figure 4 below. No other parts of the infrastructure e.g. the filter drums or aeration systems appeared to be operational. Additionally, the lids of the system were in a poor condition with large gaps present which could allow rain water ingress.



Figure 4 – The old PTP as observed during the inspection.

When questioned, GR noted that effluent from one section of the site (described as the Therapy Centre) which includes effluent from a kitchen and 3 toilets are still serviced by this system, contrary to what was stated on the previous visit. When I questioned why it was not serviced by the operational PTP, it was stated to be the result of the Therapy Centre being on a separate drainage system and the lack of ability to connect to the new system. While GR claimed that the system manages a very small to minimal amount of effluent, I expressed my concerns that this, due to the lack of treatment, was essentially being operated as a cesspit. This concern was compounded when GR confirmed that this system does not have a management regime with no cleaning or servicing taking place. The only element of the system which does not classify it as an imminent risk is that the outfall/discharge pipe is dry (presumably isolated) with no evidence of recent discharges. This is seen in Figure 5.



Figure 5 – The outfall/discharge pipe from the old PTP on site as observed during the inspection.

At present I am confident that there is no through flow of untreated effluent, with it being contained in the primary settlement tank. However, this will need to be addressed, with GR noting that this should be an issue for the site's Estates Team. While I understand the need for the provision of a Therapy Centre and associated drainage, if the effluent cannot be managed by the operational PTP, then other options will need to be explored to ensure all effluent produced by the site is treated and managed effectively. I requested that contact details for the Estates Team be shared with me so that I can open a dialogue with them regarding this future management. I will also speak with NRW's permitting team to explore other options available. This is actioned below.

The sample point was observed and while the effluent appeared clear there was a notable

amount of grey staining around the pipework. Additionally, there was a build up of sediment in the upstream pipework. These observations can be seen in Figure 6. I requested that the removal of excess sediment and staining be added to the next scheduled cleaning. This is actioned below.



Figure 6 – The sample point as observed during the inspection.

Finally, the discharge point and pond were inspected to ensure no detrimental environmental impacts were occurring due to the discharge. On previous inspection the exact location of the discharge point could not be located due to high water levels and vegetation growth. However, on this occasion the outfall pipe was found to be located at ~ST1613685036. A clear disturbance of the water at the outfall indicated active and

continual discharge which confirmed that this was the final treated effluent. While the effluent actively discharging appeared clear, there was significant grey material in and around the immediate vicinity of the outfall, indicating an accumulated concentration of sewage material. While I raised this as a concern to GR, I noted that due to the presence of vegetation and reeds within the pond this could be an accumulation of dilute sewage material over months, especially due to the period of hot, dry weather and low water levels experienced in the weeks and months prior to the visit. The water in the remaining, open water sections of the pond appeared clear and free of pollution. These observations are evidenced in Figure 7.



Figure 7 – The discharge point and pond as observed during the inspection.

Due to the nature of the observations and the use of the pond as a water source for livestock I stated to GR that I would return to site the following week with water sampling equipment to collect evidence. This would indicate the quality of the effluent, whether the PTP was operating effectively, and if there was any detrimental environmental impact. GR agreed and this was subsequently organised to take place on the 24/09/2026.

No further observations were made during this visit.

Final Discussion

I outlined my observations, concerns and actions to GR who agreed to action what they could and facilitate the remainder of the actions for completion. No further questions were asked.

I left site at 11:19.

Breaches of permit conditions

No breaches of permit conditions were observed during this inspection. However, I have concerns regarding several aspects of the site's infrastructure which, if not addressed, could lead to a breach of permit conditions, environmental impact and enforcement actions against the site. In order to prevent this please ensure all actions below are completed by the dates specified.

Actions required by dates specified

1. Undertake a full inspection and service of the system to ensure it is treating effluent effectively to the permitted standards.

Deadline: 21/11/2026

2. Provide waste transfer notes for both the recent and forthcoming cleans of the system.

Deadline: 21/10/2026

3. Remove all build up of sediments on the ledges within the effluent chambers to ensure it does not adversely impact the treatment or effluent quality.

Deadline: 21/10/2026.

4. Provide the contact details of the Estates Team so that NRW can discuss the options to bring the Therapy Centre's effluent management under appropriate regulation.

Deadline: 21/10/2026.

5. Remove the excess sediment and staining from the sample point pipework during

the next clean on site.
Deadline: 21/10/2026

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.

Other advisory comments

No other advisory comments.

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, 03000 65 4651.

Thank you,

Elis Nuttall.

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

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

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.