

Compliance Assessment Report CAR_NRW0052101

Permit being assessed: AN0235601

For: Hafod Quarry, **held by:** TARMAC TRADING LIMITED

At: Hafod Quarry, Abercarn, Newbridge, Caerphilly, NP11 5LH.

Type of assessment carried out: Site Inspection,

Reason: Other.

On 10/06/2026, between 10:00 and 14:30.

Parts of permit assessed: Site drainage infrastructure

NRW Lead Officer: Elis Nuttall, accompanied by: Gavin Summerhill.

Report sent to: Tarmac Trading Limited, Site Operator, on 23/06/2026.

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

Part of permitted activity assessed (criteria)	Assessment result	Non-compliant permit condition
WQ-C1 - Water Quality - Emissions and monitoring - Emissions to water	Ongoing (O)	3.1.2 - Emissions to water
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-A1 - Water Quality - Management - General management	Action only (X)	
WQ-B3 - Water Quality - Operations - Operating techniques	Action only (X)	
WQ-B4 - Water Quality - Operations - Improvement programme	Action only (X)	
WQ-B3 - Water Quality - Operations - Operating techniques	Action only (X)	
WQ-D1 - Water Quality - Information - Records	Action only (X)	
WQ-B4 - Water Quality - Operations - Improvement programme	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-C1	Comply with the actions set by NRW as part of this investigation.	23/09/2026
WQ-A1	Provide NRW with photographic evidence of the inside of silt trap 3 as evidence of its condition.	23/07/2026
WQ-A1	Inform NRW why there is no infrastructure in place in Silt Trap 4 for it to act effectively as a silt trap.	23/07/2026
WQ-B3	Clear the interception chambers of effluent so that an assessment of how it operates can be made. Inform NRW of how the system operates once identified.	23/07/2026
WQ-B4	Undertake corrective actions on the interception chambers if/where needed.	23/07/2026
WQ-B3	Include cleaning and assessments of the road drainage system in the regular maintenance programme for the site going forward.	23/07/2026
WQ-D1	Provide evidence of regular maintenance and cleaning of the road drainage system via waste transfer notes and assessment records	23/07/2026
WQ-B4	Undertake a full survey and assessment of the road drainage system to form an updated plan and confirm how it works. Any issues/faults shall be identified and communicated with NRW to agree an acceptable deadline to complete remedial works.	23/08/2026

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.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

Site Visit Report

This report details the site visit made by Natural Resources Wales (NRW) on the 10/06/2026 to Hafod Quarry, Abercarn, permit reference number EPR- AN0235601.

I (Elis Nuttall (EN)) and Gavin Summerhill (GS) (NRW Environment Officers) attended Hafod Quarry at 10:00 for a site inspection, specifically to investigate the site drainage arrangements, where we met with the site manager (LJ). The weather was mild with intermittent rain at the time of the visit.

General Observations

The site is a quarry and asphalt plant located in Abercarn, Caerphilly.

This permit covers site drainage discharges when flows in the Nant Hafod Fach (receiving watercourse) are under 0.53m³/second. The discharge shall consist solely of trade effluent comprising of site drainage from quarrying activities and shall not contain any poisonous, noxious or polluting matter or solid waste matter. The volume of discharge shall be dependent on rainfall. The following composition limits shall not be exceeded:

- 80mg/l of suspended solids
- 5mg/l of mineral oil
- A pH value of 9 pH units or less than a pH value of 6 pH units

The site was operational at the time of the visit.

Please note, this permit has undergone a variation to consolidate it with AN0337201 and to include on-site treatment of site drainage. This variation is due to come into effect on 31/10/2026.

Initial Discussion

This visit was undertaken in response to continued breaches of site emissions limits (suspended solids) despite the operator undertaking major infrastructure improvements to increase site runoff storage capacity and to install water quality treatment systems. It is believed that there could be additional inputs of surface water from offsite which are picking up diffuse pollution and entering the site drainage channels, inflating the concentration of suspended solids at the sample point. As a result, we conducted this visit to investigate possible sources and pathways for pollution not passing through the permitted drainage systems.

LJ began the meeting by outlining the updated drainage and treatment systems on site, highlighting points where they believed off site drainage was entering the system. We formulated a brief plan which included following the course of Nant Hafod Fach from its highest accessible point and follow it downstream to where it is culverted underneath the site and observe any distinct runoff/input points not originating from the site. We would then investigate the same aspects on an unnamed watercourse to the SW of the site and finish by observing the road drainage system leaving the site. LJ agreed to this and we proceeded to the first observation point.

Site Visit Observations

We began our site observations by following Nant Hafod Fach from the point where it emanates at ST299197172 then follow it downstream to identify any points where additional inputs could be transporting sediments into the watercourse. At the time of the visit there was no flow in the watercourse, as seen in Figure 1.



Figure 1 – The point where Nant Hafod Fach emanates and the start point of our site visit.

We walked downstream with LJ as far as where Nant Hafod Fach crosses the site boundary at ST226569953, however no input points were identified. At this point LJ left GS and I to retrieve their vehicle and to drive back to site, leaving us to inspect the remainder of the watercourse. There was still no flow in the watercourse at this point, as evidenced in Figure 2. It is key to note that it started raining moderately at this time.



Figure 2 – The point where Nant Hafod Fach enters the site. No flow at the time of the visit.

At ST2248496544 some of the site drainage infrastructure was visible, including the pipes transporting water between lagoons as well as the newly constructed settlement lagoon. It is noted that the volume of water being held in this lagoon was minimal at the time of the visit. These observations can be seen in Figure 3.



Figure 3 – Site drainage infrastructure as observed during the visit.

GS and I walked the footpath along the boundary of the site. While we observed numerous eroded paths (as seen in Figure 4) reported to have been created/caused by bikes, there was no active runoff of any kind observed at the time of the visit. We walked the footpath to the point where it joins Lower Brook Street at ST2201796052. No active runoff or flows of any kind were observed. We proceeded to check the permitted discharge point.



Figure 4 – An example of the areas of erosion reportedly acting as a conduit for polluted runoff.

The sample point was observed. The water itself was running clear that the time of the visit although there was evidence of significant siltation on the bed of the leat both at the sample point and downstream. This is evidenced in Figure 5.



Figure 5 – The sample point, upstream (left) and downstream (right) as observed during the visit.

On investigating around the sample point, a lateral pipe previously identified by NRW sampling staff discharging polluted water was located ~4m upstream of the sample point. There was clear evidence of siltation around the outfall, as can be seen in Figure 6. At this time it was not clear where this lateral pipe was originating and what this discharge was. However it was known that the road leading up to the site is serviced by a closed drainage system which includes gullies, silt traps and interceptor chambers. It was decided that the leat would be walked and inspected back up to the site before officers retrieved drain lifting equipment from the incident vehicle to survey this drainage system. LJ rejoined us at this point to undertake upstream investigations.



Figure 6 – Lateral pipe discharging to the leat directly upstream from the sample point.

We walked the leat upstream to identify any additional inputs or issues which may be contributing to the ongoing siltation issues. A large 800mm pipe was found at ST2201296038 discharging clean water to the leat. From the drainage plan the pipe is listed as taking water from the public footpath and surface water via a soakaway on the opposite side of Lower Brook Street. Between the sample point and this pipe there was a clear flow in the leat, however directly upstream of the outfall of this pipe there was no flow. This pipe and the water quality can be seen in Figure 7. After making these observations we continued our investigations upstream.



Figure 7 – 800mm pipe discharging to the leat as observed during the visit.

Further upstream at ST2205396069 another area of erosion caused by bikes was observed, as seen in Figure 8. LJ noted this as a major area of concern and that it becomes majorly silted during heavy rainfall with water clearly running over the eroded, exposed soil from off site. It is noted that there was no silty runoff observed at the time of the visit, however it is clear that the lack of vegetation as a result of the bike tracks pose a very high risk of erosion and silt mobilisation. It is also clear that a section of the concrete channel has been removed in order to accommodate this bike track.



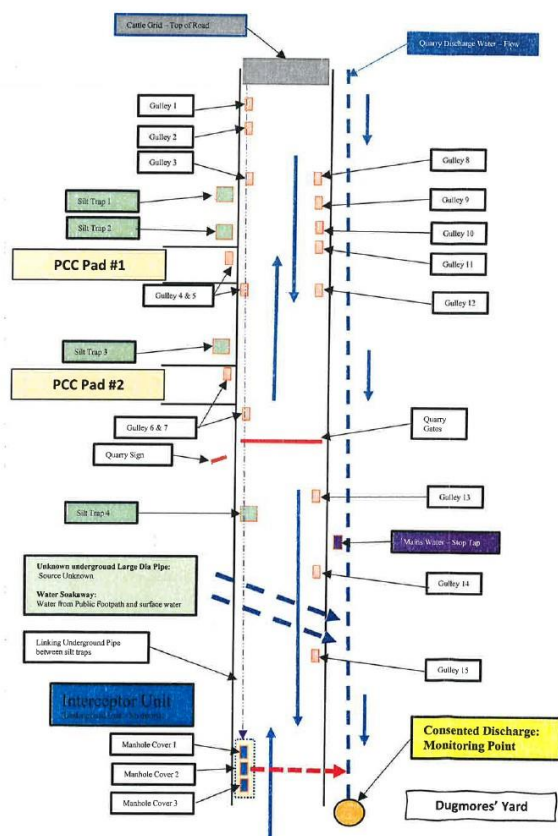
Figure 8 – Exposed area of soil caused by bike tracks.

We walked the leat as far as ST2209496138 to where the new sample point will be located once the variation to the site's discharge permit comes into effect in October 2026. There was no flow from upstream present in the leat (as seen in Figure 9) so no further upstream investigations were undertaken. We returned to the vehicle in preparation to survey the road drainage system.



Figure 9 – The leat near the forthcoming new sample point as observed during the visit.

Drainage plans for the enclosed road drainage system were available and can be seen in Figure 10. It is noted that the plan is dated 2022 but LJ was not aware of any changes made since this plan was created.



Tarmac Limited – Hafod Quarry
 Title: Surface Water Discharge System on Entrance / Exit
 Road
 Date: March 2022
 GAA

Figure 10 – Surface water discharge system on entrance/exit road (2022)

It was decided to survey the system in the direction of flow, checking the infrastructure stated to be in place as well as the conditions and water quality within the chambers where possible. It is key to note that the intensity of the rainfall increased before this section of the visit, visibly increasing the volume of surface water present on the road leading to site. The conditions of the road at the time of the visit can be seen in Figure 11, with residual silt/mud present being tracked on/off site by vehicles and increased runoff entering the road gullies. It is noted that there were road sweepers and tankers on site undertaking maintenance at the time of the visit.



Figure 11 – The conditions of the road as observed during the visit.

In turn the cattle grid, each gully, slit trap and interception chamber was lifted and inspected. The observations made are outlined below.

Cattle Grid

The cattle grid at the entrance to the site was seen to be heavily polluted with silty site runoff as expected. This flows into the adjacent catch pit. The site have installed a temporary Silt buster system which treats this catch pit effluent before discharging it back into a road gully, as seen in Figure 12. It is noted that the Silt buster was not in operation at the time of the visit.



Figure 12 – The cattle grid and catchpit as observed during the visit.

Gully Inspection

The gullies displayed significant signs of siltation, directing this effluent into the drainage system downstream of the site. It is assumed that these gullies discharge via the slit traps, into the interceptor and out into Nant Hafod Fach via the sample point. An example of the gully condition can be seen in Figure 13.



Figure 13 – The condition of the road gullies as observed during the visit.

Silt Trap Inspection

The system has 4 listed silt traps on the plan. These were all inspected in turn where possible. Silt traps 1 & 2 were lifted and appeared to be working as designed with silted effluent entering the settlement chamber and standpipes in place to allow for the settlement of solids prior to discharge. At the time of the visit the standpipe was not being overtopped and as such there was no discharge from either silt trap. These observations can be seen in Figure 14.



Figure 14 – Silt traps 1 and 2 (left and right respectively) as observed during the visit.

We attempted to lift the chamber listed to be Silt Trap 3 but due to us having the incorrect drain key sizes (as seen in Figure 15) we were unable to do so and check the infrastructure within. As such I have actioned that the site gain access to the chamber and provide photographic evidence of the internal infrastructure for assessment. Further details on this action can be seen below.



Figure 15 – The chamber identified as Silt Trap 3 which we were unable to be lifted during the visit.

On lifting the chamber identified as Silt Trap 4, it was evident that there was no standpipe present. There was silty effluent being held within the chamber, as well as minimal, clear input from upstream, but it was unclear where and if there was a discharge being made from this chamber. This is evidenced in Figure 16. On discussing this with LJ, it was noted that they recall there being a reason for the omission of a standpipe in this chamber but could not remember the details and justifications at the time of the visit. As such I have added an action for the site to inform NRW why there is no infrastructure in place in this chamber for it to act effectively as a silt trap. Further details are seen below.



Figure 16 – The chamber identified as Silt Trap 4 as observed during the visit.

Interceptor Chamber Inspection

The interceptor system was inspected. It comprises 3 manholes and discharges to the leat via the lateral pipe observed in Figure 6. Manhole 1 was lifted and found to be relatively clear of silt with minimal flow in or out. Manhole 2 was very silty with a clear discharge in the direction of the leat, and it is unknown how this silty water is not present in Manhole 1 or 3. Manhole 3 was also mostly clear with no apparent flow present. These observations can be seen in Figure 17. When discussing with LJ it was agreed that the system should be cleared of effluent so that an assessment of how it operates can be made and corrective actions made where needed. This is detailed in the actions list below.



Figure 17 – Manholes 1-3 (left to right) of the drainage interceptor as observed during the visit.

Due to the apparent significant volume of silty water discharging from Manhole 2, the discharge point was checked again and found to be considerably siltier than when it was observed earlier in the visit. As such it suggests that this is the primary reason that continued breaches of consented limits are being experienced. This can be seen in Figure 18. While visually it was apparent that this was breaching the site discharge limits, I did not sample the discharge at the time of the visit and I have not scored it as a breach on this occasion. I have noted it as an ongoing non-compliance that we are working towards resolving. This is reflected below.

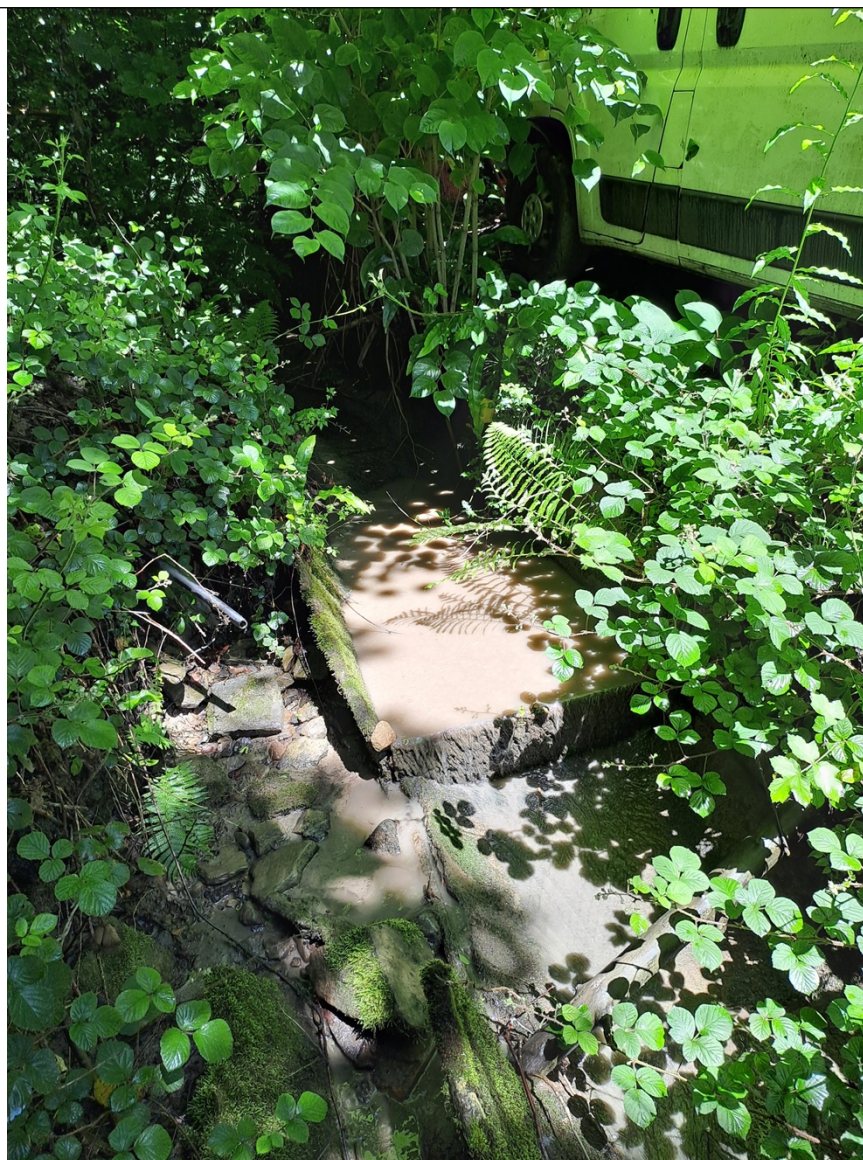


Figure 18 – The permitted sample point on a subsequent check during the visit.

Whilst on site, LJ requested that the gully cleaning crew present to undertake clearance work on all gullies, silt traps and interceptors. I have actioned that evidence be provided of the cleared system and waste transfer notes shared for the effluent removed and transported off site.

No further observations were made during this visit. We returned to the site office to discuss our findings and actions.

Final Discussion

On returning to the site office I outlined my findings and areas of concern to LJ. From the observations made and evidence gathered, my main concerns from this visit is the condition and management of the road drainage system, specifically the interceptor system. This system appears to be discharging untreated effluent to the leat, causing the

permitted discharge to continually breach consented limits. As stated, while there is no direct discharge of site drainage from any lagoons on site to the leat, the road runoff that is entering the drainage gullies is still classed as site drainage/runoff and must be accounted for and the site must take responsibility for it. As such, I have actioned that a full survey and assessment be made of the entire road drainage system and any issues identified (i.e. any reasons why the system is not operating as designed) should be rectified by appropriate maintenance measures. Appropriate deadlines can be agreed if/when issues are identified. LJ noted that any maintenance required will be undertaken and that more regular gully clearing will be added to the scheduled maintenance for the site. I have actioned that this maintenance should be evidenced to NRW via maintenance reports and wate transfer notes.

No further discussions were held.

We left site at 14:30.

Breaches of permit conditions

Below are the permit breaches that were identified during the site inspection.

ONGOING NON-COMPLIANCE – PERMIT CONDITION 3.1.2 – Emissions to water

A visual assessment of the effluent clearly shows elevated suspended solids. No samples were taken at this time but regular exceedances have been recorded by NRW over the past several months. As such this has been recoded as an ongoing non-compliance and not a new/separate breach. See actions list below for corrective actions to resolve this issue.

Actions required by dates specified

1. Provide NRW with photographic evidence of the inside of silt trap 3 as evidence of its condition.

Deadline: 23/07/2026

2. Inform NRW why there is no infrastructure in place in Silt Trap 4 for it to act effectively as a silt trap.

Deadline: 23/07/2026

3. Clear the interception chambers of effluent so that an assessment of how it operates can be made. Inform NRW of how the system operates once identified.

Deadline: 23/07/2026

4. Undertake corrective actions on the interception chambers if/where needed.

Deadline: 23/07/2026

5. Include cleaning and assessments of the road drainage system in the regular maintenance programme for the site going forward.

Deadline: 23/07/2026

6. Provide evidence of regular maintenance and cleaning of the road drainage system via waste transfer notes and assessment records.

Deadline: 23/07/2026

7. Undertake a full survey and assessment of the road drainage system to form an updated plan and confirm how it works. Any issues/faults shall be identified and communicated with NRW to agree an acceptable deadline to complete remedial works.

Deadline: 23/08/2026

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 at this time.

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.