

Compliance Assessment Report CAR_NRW0037111

Licence being assessed: 23/64/9/0003.

For: Unnamed Tributaries of Afon Hengwm (North), Rhaeadr Ddu & Llyn Bugeilyn, held by Statkraft Energy Ltd.

At: Afon Hengwm, Aberhosan, Machynlleth, Powys, SY20 8RF.

Type of assessment: Site Inspection, Reason: Routine.

On 15/09/2020, between 09:30 and 16:25.

Parts of licence assessed: 1, 2, 3, 4, 5 & 7

NRW Lead Officer: Heidi Markham.

Report sent to: Paul Miller, Production Engineer, on 13/11/2020.

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

Part of licenced activity assessed (criteria)	Assessment result	Licence condition
WR-F1 - Discharge - Point of discharge	C3 Minor	9

Result types are explained in more detail in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
WR-F1	Ensure that the orifice plates are kept free from obstruction at all times.	Already completed

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 or civil sanctions being imposed depending on the circumstances of the offence.

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

Routine Water Resources inspection was carried out by Heidi Markham from the Ceredigion Environment Team on 15th September 2020. The Officer met with Paul Miller and Andrew Williams from Statkraft.

The audit mainly focused on the upper catchment part of the scheme under the licences 23/64/9/0003 and 23/64/11/0008.

A visit was also undertaken to Nant Bwa Drain, Afon Llywernog and Nant y Moch Reservoir, which operate under licence number 22/63/1/0024.

22/63/1/0024 - Nant Bwa Drain

The water abstracted from Nant Bwa Drain is used for hydroelectric power generation.

At the abstraction point there was a small amount of vegetation obstructing the screen, but this was cleared at the time of the visit.

The water levels are measured using a float operated Thalimedes shaft encoder with data logger. Data was downloaded at the time of the inspection and the Thalimedes was calibrated.

No issues were identified.



Figure 1 & 2: Nant Bwa Drain abstraction point and orifice plate

22/63/1/0024 - Afon Llywernog

The water abstracted from Afon Llywernog is used for hydroelectric power generation transferred to Rheidol Power Station. The screen was clear from obstruction at the time of the visit.

There have been previous issues on site with the flow downstream. This has resulted in the orifice plate becoming submerged at times. The removal of some of the larger bench stones from the riverbed appears to have helped the flow by creating deeper pools and providing a better downstream gradient. The Officer was informed that there have not been any issues on site that the Production Engineer is aware of and at the time of the inspection, no issues were identified. It is advised that the site is monitored on a regular basis to ensure the orifice plate remains un-obstructed.

No issues were identified.



Figures 3 & 4: Orifice plate and abstraction screen at Afon Llywernog

22/63/1/0024 - Nant y Moch Reservoir

Water abstracted from Nant y Moch Reservoir is used for hydroelectric power generation. The abstraction point was not inspected during the visit. One of the generators at Cwm Rheidol Power Station are currently out of commission and the flows at Nant y Moch are being controlled and monitored more than usual to accommodate for this.

No issues were identified during the visit but the Officer had been notified of a drop in compensation flow that had been recorded on 25th August 2020. The compensation flow was recorded as being around 0.1551 cumecs for approximately 9.5 hours. This is 0.0027 cumecs below the required compensation flow. On this occasion, as the rate was still at a flow of over 98% of the required compensation, no further action is required. Please note that the compensation flow stated in the licence conditions must be met at all times.



Figures 5 & 6: Nant y Moch Reservoir compensation flow.

23/64/11/0008 - Llyn Penrhaeadr

The abstraction point and outfall for Llyn Penrhaeadr were inspected. The water abstracted from this site is transferred to Nant y Moch Reservoir. The water level is measured using the Thalimedes shaft encoder with data logger. There is also a borehole dipper that is used to obtain a manual reading to check the accuracy of the data logger.

The orifice plates were blocked upon arrival at site. These were unblocked during the visit. It is important that these are checked and kept clean and clear from blockage at all times. There have been discussions over work being carried out in order to prevent this from occurring in the future.

The screen was free from debris at the time of the visit.



Figures 7 & 8: Gauging board and orifice plates at Llyn Penrhaeadr





Figure 9 & 10: Vegetation directly upstream of the weir & screen at Llyn Penrhaeadr

23/64/9/0003 - Hengwm

The intake and orifice plates were inspected during the visit. Both were found to be clear from obstruction.

No issues were identified.





Figure 11 & 12: Intake and orifice plates at Hengwm

23/64/9/0003 - Llyn Bygeilyn

The outfall and abstraction point were inspected during the visit. Water levels are measured using the Thalimedes shaft encoder. The data logger accuracy is checked against a manual reading from a borehole dipper. A calibration was carried out on site during this visit and the screen was also cleaned at the time.

No issues were identified.





Figure 13 & 14: Outfall and screen at Llyn Bygeilyn

END.

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 licence is issued to you under the Water Resources Act 1991 as amended by the Water Act 2003. You have a responsibility to comply with the conditions of your licence 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.

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 resource action criteria (used in section 1 and 2):**WR A: Abstraction specified by Licence**

- WR-A1 Source of supply
- WR-A2 Points of abstraction
- WR-A3 Means of abstraction
- WR-A4 Purposes of abstraction
- WR-A5 Period of abstraction
- WR-A6 Quantities
- WR-A7 Land
- WR-A8 Other specified on licence

WR B: Abstraction measurement and records

- WR-B1 Means of measurement
- WR-B2 Recording
- WR-B3 Reporting

WR C: Surface / Groundwater level and protected flow

- WR-C1 Minimum hands-off flow/level requirements
- WR-C2 Flow/level measurement devices
- WR-C3 Recording
- WR-C4 Reporting

WR D: Environmental monitoring and information

- WR-D1 Recording
- WR-D2 Reporting
- WR-D3 Notifications

WR E: Fish and eel passage

- WR-E1 Infrastructure specified by licence
- WR-E2 Maintenance and records

WR F: Discharge

- WR-F1 Point of discharge
- WR-F2 Infrastructure
- WR-F3 Measurement
- WR-F4 Recording
- WR-F5 Reporting

WR G: Impoundment specified by licence

- WR-G1 Inland water to be impounded
- WR-G2 Manner and extent of impoundment
- WR-G3 Point(s) of impoundment
- WR-G4 Construction and removal requirements
- WR-G5 Other specified on licence

WR H: Borehole infrastructure

- WR-H1 Infrastructure and accessibility
- WR-H2 Maintenance and calibration

Enforcement response

Any licence condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution or civil sanctions. 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 (Mon to Fri 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.