

Form WRD: Application for a new abstraction licence or a technical variation to an abstraction licence

Application type

Reference number (The number you generated in form WRA). Example:
WRNATURALRESOURCESWALES1101

WRHOCHTIEF(UK)CONSTRUCTION1210

Are there any applications currently being assessed by us that are linked to this application?

Yes

Is the proposed abstraction going to be aggregated with another existing abstraction?

No

Linked applications

Please confirm how this application is linked to the other application(s)

Example: this application could be one of multiple abstractions and/or impoundment licence applications at the same site. The proposal could involve water rights trading, or this application could be linked to another application for a previously exempt activity.

PAN-021542 - Abstraction of groundwater (de-watering) from the tunnel shaft during construction works.

PAN-020743 - Environmental Permit for discharge of any excess water (dewatering etc.) from the tunnel shaft construction works.

This new abstraction application is for abstraction of fresh water from Nant yr Efail to operate hydraulic drilling equipment used to construct the shaft.

Linked application numbers

PAN-021542

PAN-020743

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Are any applications, at the same site; being assessed by the Environment Agency?

No

Tell us when you want your abstraction licence to end: [DD/MM/YY]

01/06/2025

If you require a shorter or longer duration licence, please provide details and your justification

abstraction is only required for the construction period of the proposed tunnel shaft to provide water to operate hydraulic drilling equipment.

Work should be complete by March 2025, however a 3 month contingency is given for the abstraction end date

Abstraction details

Abstraction location name/reference

Cilfor - Nant yr Efail

Abstraction point type

Single point

National Grid Reference

SH 62567 37928

Do you have any further points of abstraction?

No

Means of abstraction

Provide full details of the equipment you propose to use to abstract water, such as maximum pump capacity and any relevant dimensions, e.g. pipe diameter. For groundwater abstractions, include details about the borehole (depth and diameter) and details of screening and lining.

It is proposed to abstract water from Nant yr Efail using a pump. The surface water abstraction will be for up to 450m³ per day. The pipe diameter is expected to be up to 225mm. The maximum pump capacity is 50 l/s. The pipe will be placed in the stream and pinned in place on land adjacent to the bank. The pipe within the stream may need to be kept in place by placing it between wooden stakes (driven into the channel bottom) and weighed down by placing a small gravel filled bulk bag on top of the pipe.

No formal headwall structure is proposed.

Abstraction quantities

Abstraction location name/reference
Cilfor - Nant yr Efail

What purpose will the water be used for?
To supply water to operate a hydraulic drill used for tunnel shaft construction

Period of abstraction Will it be all year?
No

Start Date: [DD/MM/YY]
01/07/2024

End Date: [DD/MM/YY]
01/03/2025

Maximum quantities (cubic metres)
Annual 108,000 Daily 450 Hourly 18.75

Peak abstraction rate (in litres per second)
50

Number of hours of abstraction per day
24

Add quantities for another location?
No

Calculations and supporting information

Use this section to show us how you have calculated the amount of water you require. This should include details of your operational regime (for example, number of hours and days you intend to abstract, number of units produced or area to be irrigated). We use this information to determine if the volumes you propose to abstract are appropriate for the purpose. Depending which industry you are in, you may need to provide additional information below.

If your proposal involves the provision of a residual flow via a notch or orifice, provide information on how this is being calculated. This should include details of the equation being used.

The hydraulic drill requires up to 450m³ of water to operate per day.

Water will be abstracted at 50 l/s and contained within a tank on site. Abstraction will only be undertaken as required and may be intermittent. Water will be recycled on site and re-used as to limit the abstraction quantity. 450m³ per day is a conservative estimate and unlikely to be realised when accounting for water recycling measures on site.

The annual volume (108,100m³) is based on a worst case abstraction of 450m³ per day over an 8 month construction period.

Means of measurement

State how you intend to measure the quantity of water you abstract. You do not need to do this for a temporary or transfer licence.

Meter

Water efficiency

Provide details of what measures you provide or intend to implement, to ensure efficient use of water. This could include water storage, re-use or recirculation, monitoring and checking for leaks, undertaking water audits or other industry specific good practice.

Water will only be abstracted where required to operate the hydraulic drill. Water will be recycled and stored within a tank / lagoon on site as to minimise the abstraction quantity.

Fish and eel considerations (surface water abstractions only)

Confirm the fish species present at your site. If you're not proposing any measures to protect fish and eels, you must justify this. For example, we may have confirmed in our pre-application response that the intake is inaccessible to fish or you undertook a fish survey to confirm.

A fish habitat assessment (report reference C0233-ATM-GES-ZZ-RP-X-0005) has been undertaken and identified Nant yr Efail as having a low fish habitat quality.

Hochtief UK are happy to fix a screen to the intake pipe to NRW's specification i.e. 2mm mesh size, where required.

Discharge details

If you intend to return any of the abstracted water to the environment, provide details below. Details of discharge location(s) should correspond with any maps submitted. Do not include discharges to a public sewage system.

	Discharge location name / reference	National Grid Reference of discharge point (12 digit)	Total volume to be discharged (cubic metres)	Environmental Permit for Water Discharge Activity number (if applicable)
	Nant yr Efail - Site	SH 62312 37853	-	-
	Nant yr Efail - downstream	SH 61888 37859	-	-
	-	-	-	-
	-	-	-	-

Provide a description of the structure and equipment involved in discharge.

An Environmental Permit for the discharge has been submitted (PAN-020743). Discharge will be made via a 225mm / 300mm pipe. 2no. discharge locations are possible:

SH 62312 37853 - should the discharge water not include any saline content

SH 61888 37859 - should the discharge include saline content

Other abstractors / water users

Provide details of nearby abstractors or users of water who could be affected by your proposal. This should include deregulated users (exempt activities or abstractions < 20 cubic metres per day), anglers and canoeists. Your local authority's environmental health will hold details of exempt domestic abstractors.

No other nearby licenced abstractors (+20m3) have been identified.

Local abstraction data (for abstractions less than 20m3) has been obtained from the local authority. Local abstractions are noted for groundwater abstractions from upland rural farming applications. No abstractions are noted within 200m.

Planning application

Have you sought advice on your planning application?

Yes

Submit a copy of the Planning Authority's response.

- File: Decision Notice - Gwynedd CC.pdf - [Download](#)

Declaration

By signing below, you are declaring that, to the best of your knowledge; the information given in this form, on any map and in any supporting or additional information; is true.

Signed Aled Williams
Print name Aled Williams
position Associate - Flood Risk & Drainage

If an agent is to sign on behalf of the Licence Holder, a letter of authorisation from the Licence Holder is required.

- File: Environmental Consent Application authority letter 05.06.23.pdf - [Download](#)

Date

* 12/10/2023

Would you like a copy of your submission?

Yes

Your email address

aled.williams@waterco.co.uk