

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

WRDOLAWENCYF2112

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

No

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

No

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]

31/12/39

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

Nominally indicated 18 years.

Abstraction details

Abstraction location name/reference

Cilyrychen Quarry

Abstraction point type

Single point

National Grid Reference

SN 61450 16550

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.

Pump is Godwin Dri-PrimeCD225m
Maximum pump capacity 735 m³/h discharge heads to 49m
200mm suction and delivery connections
Once pumped out of quarry void, then discharge operating under discharge permit BF0196101
Discharging via 10" open channel spillway to a tributary of the River Marlais at OS grid ref SN 6170 1670

Abstraction quantities

Abstraction location name/reference

Cilyrychen Quarry

What purpose will the water be used for?

dewatering

Period of abstraction Will it be all year?

Yes

Maximum quantities (cubic metres)

Annual 268459 (based on 24h at hourly rate)

Daily 17640 (based on 24h at hourly rate)

Hourly 735

Peak abstraction rate (in litres per second)

204 (based on 24h at hourly rate)

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 abstraction rates provided are based on the maximum capacity of the pump intended to be used to dewater the quarry void. This ability of this pump to achieve the desired yield was successfully demonstrated earlier in 2021 at the proposed location. On this basis, the proposed maximum abstraction rate is 735 m³/hr and the maximum annual, daily and l/s rates have been determined from this m³/h rate.

The initial dewatering of the void is anticipated to take a few months at most. Once the void is dewatered initially, a lower and infrequent pumping rate is anticipated.

The supporting document for the whole abstraction licence application is attached here:
GNX-JBAU-XX-XX-RP-EN-0001-S3-P01.01-CilyrychenNRW-withAppendices.pdf

Additional document. (Spreadsheet file formats need to be: .xls, .xlsx, or .ods)

- File: GNX-JBAU-XX-XX-RP-EN-0001-S3-P01.01-CilyrychenNRW-withAppendices.pdf - [Download](#)

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.

Reasonable steps have been taken to secure efficient use. These include:

- A very low impact on Good quantitative resource availability (WFD GW body ID GB41002G200600).
- A non-consumptive abstraction for dewatering purposes, with the water being returned to the River Marlais under discharge permit number BF0196101.
- All water supply infrastructure is newly constructed and installed, using the latest technology to achieve an efficient abstraction e.g. new pump and generator; and
- The pipes will be regularly checked for leaks.

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)
	River Marlais tributary	SN 61700 16700	735 m3/h	BF0196101
	-	-	-	-
	-	-	-	-
	-	-	-	-

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

The discharge from the Cilyrychen quarry void is pumped up out of the void, then gravity discharged via a 10" open channel via spillway to a tributary of the River Marlais at OS grid ref SN 61700 16700. Prior to discharge to the tributary, the discharge is conveyed via a series of settlement lagoons at OS grid ref SN 61700 16650.

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.

The Ammanford and District Angling Club has fishing rights downgradient of the site on the River Loughor.
There are no known canoe clubs in the vicinity (google maps search).
There are two private water supplies in the area.
Further details are given in the supporting document.

Planning application

Have you sought advice on your planning application?

Yes

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 Dafydd H Jones
Print name Dafydd Huw Jones
position Director

Date

* 22/12/2021

Would you like a copy of your submission?

Yes

Your email address

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