

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

WRACAGGREGATESLIMITED0404

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

Abstraction details

Abstraction location name/reference

ABS_01

Abstraction point type

Area

National Grid Reference

204789 204196

Downstream National Grid Reference (If abstracting from a reach), or corners of the area.

204606 204129
204931 204058
205038 204374
204674 204449

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.

During initial, Stage 1, dewatering of pond abstraction is likely to be via a floating submersible pump(s) with a nominal maximum pumping rate of 300 litre per second.

When quarry is dewatered abstraction will continue to remove accumulated rainwater and groundwater inflow to permit dry working, Stage 2. The water will be abstracted from a sump in the base of the quarry by a floating submersible pump(s) with a nominal maximum pumping capacity of 300 litre per second. A lower rated pump may be used as the volume abstracted to keep the workings dry is anticipated to be much less than that to dewater the quarry in Stage 1

Abstraction quantities

Abstraction location name/reference

ABS_01

What purpose will the water be used for?

Transfer only

Period of abstraction Will it be all year?

Yes

Maximum quantities (cubic metres)

Annual 3,650,000

Daily 10,000

Hourly 1000

Peak abstraction rate (in litres per second)

300

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.

During Stage 1, the dewatering of the flooded void, the pumping rate will be up to the maximum allowed by Environmental Permit ref. BP0236901/V001, that is 10,000m³/day.

During Stage 2, maintaining a dry void for mineral extraction, previous pumping rates indicate that the maximum abstraction rate is likely to be c. 5,700m³/day. But the operator will only abstract the minimum required to maintain a dry quarry.

Details of the volumes can be found in the hydrogeological impact appraisal uploaded with the application (SLR (June 2023 Carew Quarry Hydrogeological Impact Appraisal 407.063401.00001 V1 Issue.

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.

The applicant will pump the minimum volume of water required to maintain a dry working area and all water will be returned to the aquifer.

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)
	DIS_01	204595 204048	10000	BP0236901/V001
	-	-	-	-
	-	-	-	-
	-	-	-	-

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

Discharge pipeline from dewatering sump diameter to be confirmed

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.

See hydrogeological impact appraisal uploaded with application (SLR June 2023 Carew Quarry Impact Appraisal 407.063401.00001 Issue V1

Planning application

Have you sought advice on your planning application?

No

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 Anthony Allen
Print name Anthony Allen
position Operations Manager

Date

* 12/06/2023

Would you like a copy of your submission?

Yes

Your email address

gkeenan@slrconsulting.com