

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

WRAmeyrail1608

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]

31/08/23

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

abstraction is for engineering works during construction for

pump station
Bio-waste tank
Carriage wash tank

Abstraction details

Abstraction location name/reference

Taff Wells Depot

Abstraction point type

Area

National Grid Reference

312529 183358

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.

1. 4" pump head at 5m 200/m³ per Hour
2. The maximum flow rate of trade effluent that may be discharged shall not exceed 50 cubic metres per hour or 13.8 litres per second. The maximum daily discharge volume must not exceed 600 cubic metres per day.
3. The trade effluent to be discharged is derived from:
 - ground remediation water and surface water from excavations, pre-treated via a lamella plate separator or equivalent unit to remove gross solids.
4. The trade effluent is expected to contain traces of suspended solids (must not exceed 400 milligrams per litre).
5. Flows must be introduced into the public sewer in such a way that will not affect the free flow of its contents, for example, surcharging downstream.

The current proposed treatment system is configured to operate with flows between 4 and 40 m³/h. Where flows exceed 40 m³/h it is likely that increased suspended solids will remain in the outflow water.

- Following chemical pre-treatment these suspended solids will be recovered using a Siltbuster HB50 (gravity operated) Settlement Unit which will remove the particles from suspension and capture them within the unit's twin hoppers.
- It is recommended you place an operative on the system to ensure you are not in breach of any discharge requirements. To reduce the number of man hours the operator needs to spend on the system, you could take advantage of our discharge monitoring system.
- The system will be placed on level ground and preferably on a stoned up area.
- The captured solids (sludge) in a solids sludge storage area where you will allow them to consolidate and remove any supernatant liquor before placing elsewhere in your landscaping scheme.
- When discharging to surface watercourse the treated waters will be expected to have Total Suspended Solids (TSS) of < 30-60mg/L and pH of between 6 and 9.

If necessary, continue on a separate sheet and upload below.

- File: Solutions-for-Suspended-Solids-Removal-1.pdf - [Download](#)
- File: D150.pdf - [Download](#)

Abstraction quantities

Abstraction location name/reference
Boundary of site and Abstraction location

What purpose will the water be used for?
Effluent Discharged

Period of abstraction Will it be all year?
Yes

Maximum quantities (cubic metres)
Annual 60,000m ³
Daily 400m ³
Hourly 200m ³

Peak abstraction rate (in litres per second)
13.8

Number of hours of abstraction per day
5

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.

Water abstraction is to remove ground water to allow series of engineering works and will be an effluent discharged

Previously works were carried required 4" pump at a rate of 200m³/H was required to be on for approx. 2 hours a day.

Our planned works 150 Days duration

$200\text{m}^3/\text{h} \times 2 = 400\text{m}^3 \text{ per day} \times 150 \text{ days} = 60,000\text{m}^3 \text{ annual}$

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.

Other (please specify):

Rate of the pump used is head height related to the set rpm. Daily records

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.

N/A. Effluent Discharge no usage.

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.

No Fish present at site.

Discharge details

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

N/A Effluent Discharge

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.

None nearby

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 James Holmes

Print name James Holmes

position Sector Director

If you need to submit additional signatures, please upload here in a separate document.

- File: James Holmes - signature.jpg - [Download](#)

Date

* 18/08/2022

Would you like a copy of your submission?

Yes

Your email address

mike.david@amey.co.uk

