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
WRSWECO1007

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]
1/12/2021

If you require a shorter or longer duration licence, please provide details and your justification
Transfer licence required to accommodate temporary pumping for dewatering works, duration estimated at 2 months and commencing September 2021. The supporting document providing details of temporary dewatering works is submitted on the following pages.

Abstraction details

Abstraction location name/reference
Trench excavation for sewerage pipes

Abstraction point type
Reach

National Grid Reference
SJ 32644 70616

Downstream National Grid Reference (If abstracting from a reach), or corners of the area.
SJ 32493 70436 - - -

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.
Well point pumping at 1m spacing from the trench excavation, allowing for 2x40m sections at a time (250m length of trench) as detailed in the supporting document.

If necessary, continue on a separate sheet and upload below.
• File: Supporting Technical Note_TRANSFER.pdf - Download

Abstraction quantities

Abstraction location name/reference
Trench excavation for sewerage pipes

What purpose will the water be used for?
Dewatering of construction trench

Period of abstraction Will it be all year?
No

Start Date: [DD/MM/YY]
1/9/2021

End Date: [DD/MM/YY]

1/12/2021

Maximum quantities (cubic metres)

Annual N/A

Daily 3456m3

Hourly 144m3

Peak abstraction rate (in litres per second)

40

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 extracted ground waters shall be settled and discharged into the Industrial Parks surface water sewer system and will be discharged to a surface water drain then to Shotwick Burn (plan attached). The levels in the receiving surface water sewer shall be monitored during periods of heavy rain.

Abstracted water will have no intervening use Dewatering operations will be conducted over a 24hour period.

Consent to discharge was received from dwrcymru via email, on condition a silt buster is used and water going into the SW lines is as clean as possible.

The maximum dewatering abstraction rate of 40l/s has been used to estimated total volume and the actual abstraction rate is likely to be lower and within the range of 15-30l/s.

A summary of the conceptual hydrogeological model and calculations to support the estimated dewatering abstraction rate are provided in the attached briefing note: Transfer Abstraction Licence Supporting Information – Construction dewatering requirements at Deeside Airfields for Praxis Gravity Sewer (May 2021).

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

- File: Calculations_Transfer.xlsx - 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.

Other (please specify):
N/A Transfer licence

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 extracted ground waters will be pumped into the settlement tanks and then will gravitate through silt socks (if required) prior to gravitating into the existing Industrial Parks surface water sewer system and will be discharged to a surface water drain then to Shotwick Brook (See attached Plan).
The levels in the receiving surface water sewer shall be monitored during periods of heavy rain.

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)
	-	SJ 32570 70534	3456m3/day	Permit to be obtained
	-	-	-	-
	-	-	-	-
	-	-	-	-

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

Dewatering operations will be conducted over a 24-hour period. The extracted ground waters will be pumped into the settlement tanks and then will gravitate through silt socks (if required) prior to gravitating into the existing Industrial Parks surface water sewer system and will be discharged to a surface water drain then to Shotwick Brook (See attached Plan).

The levels in the receiving surface water sewer shall be monitored during periods of heavy rain. This discharge point and discharge locations along the Shotwick Brook (as seen on the plan).

Note that peak discharge rate (40l/s) is a conservative estimate and discharges are likely to be less and within the average likely range of 15-30l/s.

A summary of the conceptual hydrogeological model and calculations to support estimated dewatering abstraction rate are provided in the attached briefing note:

'Transfer Abstraction Licence Supporting Information-Construction dewatering requirements at Deeside, May 2021

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.

Information on unlicensed and licensed abstractions in the area was sought from local authorities and NRW and none were identified. An unlicenced water supply borehole associated with the fisheries is understood to exist approximately 500m to the west of the trench location (from BGS borehole records) and abstracts 50l/s (72m3/day). This was considered within the assessment which indicates no significant impact on water levels from dewatering activities along the trench.

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 Karen Fitzsimons

Print name KAREN FITZSIMONS

position Senior Hydrogeologist

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

- File: Email from applicant.pdf - Download

Date

* 10/06/2021

Would you like a copy of your submission?

Yes

Your email address

karen.fitzsimons@sweco.co.uk