

Form WRE: Application for a new impoundment licence, technical variation to an impoundment licence or the removal of an existing impoundment

Water Resources Act 1991, Environment Act 1995, The Water Resources (Abstraction and Impoundment) Regulations 2006, The Natural Resources Body for Wales (Functions) Order 2012

1. Application type

New impoundment licence ☒

Removal of an existing impoundment ☐

To licence an existing impoundment ☐

Technical variation to an impoundment licence ☐

Give existing licence or pre- application reference number(s)

Complete sections 2 and 4

2. Impoundment details

All information should correspond with any maps and drawings submitted with this application

2.1 Provide details of all impoundment points. For structures spanning a watercourse, provide a National Grid Reference for each bank. If necessary, continue on a separate sheet and tick here to show that you have done this. ☐

Impoundment location name / reference	National Grid Reference for each bank, looking downstream (12 digit)	
	Left bank	Right bank
Intake	SO 18801 06833	SO 18799 06833

2.2 Please provide a full description of the impoundment, outlining its purpose and how it will operate. If this information is detailed in a supporting document, provide the document title or reference in the space below.

If necessary, continue on a separate sheet and tick here to show that you have done this. ☐

The proposed impoundment is a 100mm thick concrete wall built on top of an existing concrete channel. The wall will contain a 350mm long x 275mm high metal infill which will house a 40 x 50mm notch to allow the agreed compensation flow to bypass the hydropower scheme (Hands Off Flow), and a 175mm diameter pipe to serve the turbine. A 400x400x400mm 10mm mesh cage will be placed around the intake pipe to prevent debris from entering the pipe or block the notch.
(see Elevation drg. 01A, Plan drg. 02A and Section drg. 03, Intake Weir, for detailed information – Appendix 1)

3. Description of impoundment

3.1 Name of watercourse

The watercourse is the issuance from an underground concrete pipe at the South East corner of the Silent Valley landfill site (NP23 6PZ), on Nant Merddog.

3.2 Will your proposed impoundment result in a change to the wetted perimeter (downstream) or new submerged areas behind (upstream of) the impounding works?

No ☐ Yes ☒ If yes, ensure this is shown on any map or drawings submitted

3.3 Will the ponded area created by the impoundment be lined? No ☐ Yes ☒ If yes, give details.

The ponded area created by the impoundment will be lined by the existing concrete channel and retaining structure.

3.4 Give the height of the impoundment structure, from the downstream toe to crest or top of spillway (in metres above Ordnance Datum). If the proposal involves an existing impoundment, state the change in height (in millimetres).

The impoundment structure top of spillway will be 325mm above the downstream toe

3.5 What is the overflow or crest level of the impoundment (in metres above Ordnance Datum)?

373mAOD

3.6 What is the proposed capacity of the impoundment when full to spillway level (in cubic metres)?

0.6m³

3.7 Will the proposal create a raised reservoir? No ☒ Yes ☐

3.8 Does the proposal involve the controlled release of water to safeguard downstream flows? No ☐ Yes ☒ If yes, provide details

The proposed impoundment weir will contain a 40 x 50mm notch to allow the agreed compensation flow to bypass the hydropower scheme (Hands Off Flow),

3.9 Is the impounded water to be used for a subsequent purpose? No ☐ Yes ☒ If yes, provide details (for abstractions, state the daily and annual quantities in cubic metres).

To be abstracted to drive a micro hydro turbine. The maximum daily abstraction is 1,494.7m³ and the maximum annual abstraction is 545,565m³

3.10 How will the impounded area be filled initially, and subsequently refilled if applicable?

The impounded area will be filled from the natural outflow from an existing underground pipe, and will be re-filled by the same means if required

4. Fish and eel passage

4.1 Confirm the fish species present at your site.

The intake structure involves the minor modification of an existing concrete channel and retaining structure and as a consequence the construction impacts are relatively modest. The existing structure already provides a barrier to any upstream migration of fish interests and the proposal will not have any impact on existing downstream migration. It is not, therefore proposed to include additional measures to safeguard fish and eels.

	Intake	Outfall
Type of fish screen	400x400x400 mesh cage	400x400x400 mesh cage
Screen aperture size (mm)	10mm	10mm
Screen height and width (mm)	400x400x400 mesh cage	400x400x400 mesh cage
Type of upstream fish passage		
Proposed flow for fish pass (m/s)		
Type of downstream fish passage		

5. Construction, maintenance and operation

5.1 Provide details of maintenance or activities relating to the operation of the impoundment.

If necessary, continue on a separate sheet and tick here to show that you have done this. ☐

Regular visual inspection of installation to identify any leakage and undertake remedial action where necessary.

5.2 Provide details of diversion works or removal of existing works.

N/A

6. Planning application

Have you sought advice on your planning application?

No ☒ Yes ☐


If yes, submit a copy of the Planning Authority's response.

7. Declaration

Please see Guidance Note WRX for details of who can sign this section and note the information in that document relating to the Data Protection Act 1998.

By signing below, you are declaring that as far as you know and believe the information given in this form, on any map and in any supporting or additional information, is true.

Signed



Print name

AMY TAYLOR

Position

TEAM LEADER - STRATEGIC PROJECTS

Date

30/11/2018

Application Checklist

Please tick the following checklist items to indicate that you have included the required information. If any sections of the form are left blank and no supporting information submitted, where we have insufficient information to make a decision on your application, we will return your application to you.

Essential:

Form WRA completed, if there have been any changes since pre-application an updated Form WRA is required ☒

Map with all impoundment points and new wetted perimeters/submerged areas clearly marked ☒

Drawings and Design Statement ☒

State number of continuation sheets (enter 0 if none included)

Where relevant:

Form WRD completed, if your proposal also requires an abstraction licence ☒

Stage 1 photo survey (contact us for more details on this requirement) ☒

Letter of authorisation from the applicant, allowing an agent to act as signatory ☐

Further information requested in our pre-application response letter to you ☐

Planning Authority response, where available ☒

Additional supporting information - please list below:

Photomontage of impoundment structure (1 page)