

# FORM WRA: Applicant details and proposal outline

Water Resources Act 1991 (as amended by the Water Act 2003),  
Environment Act 1995, The Water Resources (Abstraction and Impounding)  
Regulations 2006, The Natural Resources Body for Wales (Functions) Order 2012

## 1. Application type and fee

For the application types listed, complete this form and/or the relevant additional forms named below. Please tick which forms have been included with your application. Forms should be completed with reference to Guidance Note WRX.

- |   |                                     |                         |
|---|-------------------------------------|-------------------------|
| * Pre-application enquiry (non-hydropower)            | <input type="checkbox"/>            | Only complete this form |
| * Pre-application enquiry (hydropower)                | <input type="checkbox"/>            | Also complete form WRB  |
| * Application for a Groundwater Investigation Consent | <input type="checkbox"/>            | Only complete form WRC  |
| New full abstraction licence                          | <input checked="" type="checkbox"/> | Also complete form WRD  |
| New temporary abstraction licence                     | <input type="checkbox"/>            | Also complete form WRD  |
| New licence to transfer water                         | <input type="checkbox"/>            | Also complete form WRD  |
| New impoundment licence                               | <input checked="" type="checkbox"/> | Also complete form WRE  |
| Renewal of a time-limited licence                     | <input type="checkbox"/>            | Also complete form WRD  |
| Removal of an existing impoundment                    | <input type="checkbox"/>            | Also complete form WRE  |
| Technical variation of an abstraction licence         | <input type="checkbox"/>            | Also complete form WRD  |
| Technical variation of an impoundment licence         | <input type="checkbox"/>            | Also complete form WRE  |
| * Administrative variations to existing licences      | <input type="checkbox"/>            | Only complete form WRF  |
| * No fee required                                     |                                     |                         |

Please indicate how you wish to pay your application fee and provide a reference number where relevant.

Cheque  BACS  Credit or debit card

Your reference number

PPN-00237

## 2. Applicant details

This is who the licence would be issued to and must be a legal entity such as an individual, registered company, charity or public body. If you are an agent acting on behalf of an applicant, provide their details here and yours in Section 3. See Guidance Note WRX for clarification of the details required and signatories permissible for organisations.

### Applicant type:

- |             |                          |                 |                                     |         |                          |                |                          |
|-------------|--------------------------|-----------------|-------------------------------------|---------|--------------------------|----------------|--------------------------|
| Individual  | <input type="checkbox"/> | Limited company | <input checked="" type="checkbox"/> | Charity | <input type="checkbox"/> | Corporate body | <input type="checkbox"/> |
| Partnership | <input type="checkbox"/> | Sole trader     | <input type="checkbox"/>            | Club    | <input type="checkbox"/> | Other          | <input type="checkbox"/> |

If other, please specify

Title

Mr

Full Name

Mark Sealy

Company, Charity or  
Trading Name

Green Blades Engineering Limited

Company or Charity  
Registration Number

10238063

Registered Address

2 Jackson's Meadow  
Bidford on Avon  
Warwickshire

Postcode: B50 4HQ

Telephone Number

Office:  
Mobile: 07714 955925

Email Address

mark.sealy@tatamotors.com

We will contact you by email unless you tick here

Please specify who we should contact with regard to your site operation.

Site operations contact

Applicant

Agent

For applications for abstraction licences, please also specify who we should contact for invoices and abstraction records (returns).

Invoice address\*

Applicant

Agent

Abstraction records contact\*

Applicant

Agent

\* Not required for temporary or transfer licences.

Enter the agent's details in Section 3, or provide details of alternative or additional contacts on a separate sheet and tick here to show that you have done so.

### 3. Details of agent or individual authorised to act as application contact

This is who we will correspond with unless otherwise informed. If an agent has signed on behalf of an applicant, please include a letter of authorisation from the applicant allowing the agent to act as signatory.

Title

Mr

Full Name

Liam Brown

Company, Charity or Trading Name

Greenearth Hydro Limited

Position in Company

Managing Director

Registered Address

28 Salop Road  
Oswestry  
Shropshire

Postcode: SY11 2NZ

Telephone Number

Office:  
Mobile: 07980 670 046

Email Address

liam@greenearthhydro.co.uk

### 4. Entitlement to apply (only required for abstraction licence applications)

Does the applicant have a legal right of access to the point of abstraction?

Has a right of access

Has an expected right of access

Owner/occupier of land

Date these access rights are expected

16/11/18

For formal abstraction licence applications where you are the landowner/occupier, provide a map with the land boundary and all abstraction and discharge point(s) marked. Please tick here to show that you have done this.

For expected rights of access, please also provide the additional evidence as outlined in Guidance Note WRX. Please tick here to show that you have done this.

## 5. Application reference number

Have you undertaken a pre-application enquiry or had any previous discussions with us?

No  Yes  Provide reference number or staff member's name

PPN-00237.

## 6. Remediation work

Is this proposal as a result of a Restoring Sustainable Abstraction programme or other work requested by us?

No  Yes  If yes, provide your licence number

## 7. Source of supply

7.1 State where you intend to abstract from

Surface Water  Groundwater

Give Groundwater Investigation Consent number if applicable

7.2 Provide a 12 digit National Grid Reference for the proposed or existing abstraction or impoundment point (e.g. ST 19057 76826)

SH

68934

02950

7.3 Source of supply or location of proposed impoundment

Unnamed tributary of the Afon Alice

7.4 Site name / reference

Mark Sealy

## 8. Proposal summary

Please provide an outline of your proposal as described in Guidance Note WRX, including any sketches. If you are submitting a pre-application enquiry, this must include the quantities of water you propose to abstract. If necessary continue on a separate sheet and tick here to show that you have done this.

A 34kW hydropower scheme is proposed. This will be a grid connected scheme. Two intake weirs are proposed (referred to as 'Intake 1' and 'Intake 2'). This application form is for 'Intake 1'. The intake weir will consist of a concrete floor slab and back wall with a stainless steel intake chamber and coanda style screen. A 200mm diameter HDPE welded pipe will run from 'Intake 1' to a forebay tank adjacent to 'Intake 2' where the two abstractions will be combined. The penstock will run from the forebay tank and will be 1052 metres long with a diameter of 280mm, HDPE welded. It will run to the power house which will be next to the watercourse. The turbine type proposed is a turgo. The turbine would be turned on and off automatically depending on the water level in the forebay tank. The flow rate, and hence the turbine power, would be modulated using a spear valve on the turbine nozzle. The site's gross head is 98.3m (from the forebay tank adjacent to Intake 2 to the turbine), net head 94.6m.

A 'hands off flow' (HOF) notch will be incorporated in the intake weir and until the HOF has been satisfied, no water will be abstracted. In addition to this the proportional take, in excess of the HOF, is proposed to be 70% and this will be ensured by the screen's width being 70% of the full weir crest's width. An orifice plate will be placed over the outlet from 'Intake 1' to limit its maximum abstraction flow to the licenced amount.

Intake 1 abstraction quantities:

Maximum instantaneous abstraction flow: 19 l/s

Max hourly abstraction (max abstraction flow x 3600 sec): 67.5 cubic metres

Max daily abstraction (Max hourly abstract x 24h): 1,620.0 cubic metres

Max Annual abstraction (Max Daily Abstraction x 365 days): 591,300 cubic metres

Intake 2 abstraction quantities:

Maximum instantaneous abstraction flow: 31 l/s

Max hourly abstraction (max abstraction flow x 3600 sec): 112.5 cubic metres

Max daily abstraction (Max hourly abstract x 24h): 2,700.0 cubic metres

Max Annual abstraction (Max Daily Abstraction x 365 days): 985,500 cubic metres

[Note the max instantaneous abstraction flows have been apportioned to each intake based on the fact that the tributary's mean flow (Intake 1) is 60% of Afon Alice's (Intake 2) and an aggregate design flow (max turbine flow) of 50 l/s is required]

## 9. 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

Mark Sealy

Position

Managing Director

Date

16<sup>th</sup> October 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:

- Letter of authorisation from the applicant, allowing the agent to act as signatory
- Map showing the land ownership boundary with all abstraction and discharge point(s) clearly marked

#### Where relevant:

- Evidence of negotiations of expected access rights, if applicable
- For groundwater abstractions, results of pump test (if not previously submitted)

For Natural Resources Wales' use only:

Date received \_\_\_\_\_

Reference Number \_\_\_\_\_

Payment received Yes  Amount received \_\_\_\_\_  
No  Not required