

FORM WRA: Applicant details and proposal outline

Application type and fee

Please generate a reference number. It should start with "WR" followed by your organisation or company name and today's date in four-digit format (DDMM) without spaces or punctuation.

Example: WRNATURALRESOURCESWALES1101

Please use this use this number throughout this application. This reference number can also be used for your BACS reference if paying electronically.

WRGREENBLADESENGINEERING1909

For the application types listed, complete this form and/or the relevant additional forms named below. Tick the type of application you are applying for. Please refer to our Find out if you need a licence web-page for an explanation for the different licence types. If your proposal involves multiple licence types, tick all that apply.

See our Charges for abstraction and impoundment applications web page for details of application fees and how to pay.

New full abstraction licence. Also complete form WRD.

Please indicate how you wish to pay your application fee. If paying by BACS, please quote the reference number created in question 1 when setting up the bank transfer.

If paying by cheque, please ensure you add the six digit cheque number below.

BACS

Please add your BACS reference below

WRGREENBLADESENGINEERING1909

Applicant details

Applicant type

Limited company

Applicant details

Full Name Mark Sealy

Company, Charity or Trading Name Green Blades Engineering Limited

Company or Charity Registration Number 10238063

Applicant Registered Address

Line 1 Maple Corner 2 Jacksons Meadow
Line 2 Bidford-On-Avon
Line 3 Alcester
Line 4 Warwickshire
Postcode B50 4HQ

Applicant Contact details

Office Telephone Number 07305 239709
Mobile Telephone Number 07305 239709
Email Address greenbladeseng@gmail.com

Please indicate who we should contact regarding operation of your site, this should be the person responsible for the day to day running of the operation.

| | Applicant | Agent |
|-------------------------|-----------|-------|
| Site operations contact | X | |

For applications for abstraction licences, please also specify who we should contact for invoices and abstraction records (returns).
Not necessary for temporary or transfer licence applications.

| | Applicant | Agent |
|-----------------------------|-----------|-------|
| Invoice address | X | |
| Abstraction records contact | X | |

Details of agent or individual authorised to act as application contact

Use applicant contact details

No

Application details

Full Name Liam Brown
Company, Charity or Trading Name Greeneearth Hydro Limited
Position in Company Managing Director

Applicant Registered Address

Line 1 The Cottage

Line 2 Rhiw

Line 3 Pwllheli

Line 4 -

Postcode LL53 8AE

Applicant Contact details

Office Telephone Number 01691648378

Mobile Telephone Number 07980670046

Email Address liam@greenearthhydro.co.uk

Entitlement to apply (not required for impoundment licence applications)

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

Has an expected right of access

Date these access rights are expected

* 15/11/2022

Site map showing abstraction points

- File: 220730LB01-v3 Site layout (A1).pdf - [Download](#)
- File: 220923 Brithdir Forest Hydro Lease Option Agreement Signed.pdf - [Download](#)

For expected rights of access, please also provide the additional evidence as outlined above.

Please tick here to show that you have done this.

Pre-application number

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

No

Remediation work

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

No

Source of supply

State where you intend to abstract from

Surface Water. e.g. Stream, leat, spring

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

SH 79432 18555

Source of supply (name of watercourse or aquifer)

Nant Helygog

Site name / reference
(e.g. Tŷ Mawr Farm)

Brithdir Forest

Proposal summary

Please provide an outline of your proposal, including any sketches.

As a guide, you should include: a description of the activities which (will) take place at your site, the means of abstraction/impoundment proposed, if the proposal is related to another licence or permit (i.e. an Environmental Permit to Discharge Water) and details of any survey work undertaken. For changes to existing licences, summarise the changes proposed. Sketches or photographs that will aid our understanding of your proposal can be uploaded below.

A 34kW hydropower scheme is proposed which will produce approximately 175,000kWh per year, the annual requirement of 60 average UK homes. This will be a grid connected scheme. One intake weir is proposed on the Nant Helygog (at SH 79432 18555). The intake weir will be pre-fabricated in steel and then brought to site and sealed in place using concrete. It will have a coanda screen with 1.3mm apertures. A 280mm diameter black HDPE welded pipe (penstock) will run from the intake weir to the power house (at SH 79200 19608) and will be approximately 1,107 metres long. The turbine type proposed is a turgo. The power house will be a standard shipping container with its floor level approximately 1.4m above the water level in the watercourse. The turbine will be turned on and off automatically depending on the water level in the intake chamber. The flow rate, and hence the turbine power, would be modulated using a spear valve on the turbine's nozzle.

A 'hands off flow' (HOF) V-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.

The abstracted water will be discharged into a tributary Nant Helygog via a head wall structure at SH 79205 19597. This tributary joins the Nant Helygog 95m downstream of the outfall's location.

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 Mark Sealy

Print name MARK SEALY

Position Owner

Date

* 23/09/2022

Would you like a copy of your submission?

Yes

Your email address

greenbladeseng@gmail.com