



Rowlands View, Templeton, Narberth,
Pembrokeshire, SA67 8RG
Tel: 01834 860464
Fax: 01834 869156
www.gdharries.co.uk

Jennifer Pocock
Water Resources Permitting Team
Natural Resources Wales
Cambria House,
29 Newport Road,
Cardiff, CF24 0TP

18th June 2019

Dear Ms Pocock,

Re: Transitional abstraction licence application number: PAN-004462
Site name: Blaencilgoed and Gelli Halog quarries

Thank you for your letter of 17 April. With respect to the points you raised:

I have attached a letter of authorisation, signed by a company director to say that I am authorised to sign and submit an application for a transitional water resources licence on behalf of GD Harries & Sons Ltd

I confirm that GD Harries & Sons Ltd agree that NRW should proceed with our transitional application for a **transfer licence**, as opposed to a **full abstraction** licence and enclose a cheque for the £1,365 additional payment.

Rights of access

You wrote:

To validate your application we need to be satisfied that you have a legal right of access to the points of abstraction. On your application form you have advised that the abstraction is from land owned or leased by the applicant. If you are the landowner you should supply a map outlining the land ownership boundary in relation to the dewatered area (we will accept an updated version of the map already provided). If you don't own the land please provide details of your right to access the land where water is abstracted from e.g. through a lease or tenancy agreement.

Gerald D Harries & Sons Limited
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Registered in England & Wales
Company Registration No: 04179343 VAT Registration No: GB 115 1514 58



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The attached file "18 m14.104.d.018 Planning Boundaries_final.pdf" which was submitted as part of the recent RoMP shows the definitive boundaries. The quarry is in three ownerships over all of which planning permission exists for mineral extraction to take place to create a single void:

Ownership 1: G D Harries freehold

Ownership 2: Blaencilgoed – lease dated 1 October 2001 for a term of 99 years

Ownership 3: Gellihalog – lease dated 2 June 2009 for a term expiring 1 June 2034

Both leases grant mineral working rights and rights of access between the public highway and the quarry. Abstraction Point 1 lies entirely within the Blaencilgoed lease area and abstraction Point 2 lies entirely within the Gellihalog lease area. There are two accesses from the public highway to the Quarry:

Access 1: Public highway to Gellihalog – rights granted under the lease dated 2 June 2009. This affords access to the whole quarry complex (ie the three ownerships).

Access 2: Public highway to G D Harries' freehold land - rights granted under the lease dated 1 October 2001. This affords access to the whole quarry complex (ie the three ownerships).

Maximum abstraction quantities

You wrote: "*On your application form (table 8.1) you have not specified which are the maximum quantities you wish to have licensed*". We are not clear what you mean as Table 8.1 simply asks for the maximum quantities abstracted historically. There is no box to indicate the maximum quantity that we wish to have licensed. Indeed it is hard to specify the maximum amount because the purpose of abstraction is to prevent flooding of the working area. Much of the water pumped from the site is incident rainfall so if there is a future year that is markedly wetter than the years for which we have data then it will be necessary to pump out more water to prevent flooding. Further we understand from your letter that for a transfer licence the licensed abstraction quantities are not routinely included on the licence. Please could you clarify?

Evidence

I have attached two files: "2011-2017 Blaencilgoed pumping.xls" and "2011-2017 Gelli Halog pumping.xls" provided by Professor John Gunn which show the daily amounts pumped out of the quarry based on the meter readings. I have also provided a copy of LRC Report 2019/05

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"Hydrogeological assessment of dewatering of Blaencilgoed & Gelli Halog Quarries, Ludchurch, Pembrokeshire: 2017-2018" which has been sent to NRW by the MPA. This report shows the amount of water pumped from each sector of the quarry in each hydrometric year from 2009-10 to 2017-18. Please note that the annual totals are by hydrometric year and hence are not the same as the calendar year totals that were asked for in the licence application.

Additional requirements for dewatering applications

As requested I am attaching

- A file "Blaencilgoed Water Plan Rev B Environmental.pdf" which shows the abstraction and discharge points. The meters are located close to the abstraction points.
- A file "Blaencilgoed Quarry Section.pdf" which comprises a cross-section and a plan showing the line of the cross-section. The section runs from the western side of the planning boundary to the eastern side and hence includes present and future workings.

You asked for "*the current and planned water table levels*". In common with most karstified limestone groundwater systems there is no simple "water table" in the Blaencilgoed-Gelli Halog area. The quarry sumps are excavated to approximately 107m aOD and pumping is used to maintain the sump water surfaces at an elevation of approximately 110m aOD to facilitate safe working. The water surface elevations in the monitoring boreholes around the site are always well above this elevation emphasising the fact that there is no water table of the type seen in homogenous porous media. Evidence to support this is provided in Table 6.1a in LRC Report 2019/05 while Figure 6.3 in the same report shows that there is no correlation between groundwater elevations in three boreholes fitted with data loggers. During prolonged wet weather there is a steady increase in the input of water to Gelli Halog (much of it from a sinking stream and from concentrated recharge to dolines). When the input exceeds the capacity of the pump the water surface in Gelli Halog rises and can reach an elevation of 120m aOD without any evidence of change in groundwater elevations in the boreholes.

You asked for *pump details* which are as follows:

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- Blaencilgoed. two BS2151 HT 6" 20kW submersible pumps Fleet No: 4433 (installed 11/02/2019) and Fleet No: 5296 (installed 05/11/2018). These replaced earlier pumps. Their capacity is shown on the attached file 2151-9.pdf.
- Gelli Halog. One BS2250 HT 8" 54kW submersible pump Fleet No: 8749 (installed 5/11/2018 to replace an earlier pump). The pump capacity is shown on the attached file 2250-7.pdf. The meter is an ABB DN200 Solar Powered flow meter (Fleet No. 18156) which is non mechanical with no moving parts and hence requires no calibration.

Abstraction location.

You asked "*Please could you provide the NRGs of the corners of the area you wish to dewater*". In Blaencilgoed Quarry there are a series of settlement lagoons that form an irregular shape and water is pumped from the final lagoon. The NGR of the most northerly, easterly, southerly and westerly points are shown on file "Blaencilgoed Water Plan Rev B Environmental.pdf". The Gelli Halog quarry sump is an irregular shape which varies over time and does not have corners per se. The NGR for four points around the perimeter are shown on the file "Blaencilgoed Water Plan Rev B Environmental.pdf".

Abstraction duration

GD Harries & Sons Ltd wish to proceed with the application on the basis that any licence issued is likely to be limited to the common end date for the catchment, which is 31st March 2030.

I trust this answers you queries regarding our application, however if you require any further information, please don't hesitate to contact me.

Kind Regards

A handwritten signature in black ink, appearing to be 'SD', written over a circular scribble.

Simon Dorken
Environmental Manager

DD 01834 862356

Email SimonDorken@gdharries.co.uk



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Jennifer Pocock
Water Resources Permitting Team
Natural Resources Wales
Cambria House,
29 Newport Road,
Cardiff,
CF24 0TP

11 June 2019

Dear Ms Pocock,

I Janet Phillips, as a company director, authorise, Simon Dorken to sign and submit the applications for transitional water resources licences on behalf of GD Harries & Sons Ltd for our quarries, Bolton Hill, Blaencilgoed and Coygen.

Regards

A handwritten signature in blue ink, appearing to read 'Janet Phillips', is written over the typed name.

Janet Phillips
Director

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