

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Snowdonia Pumped Hydro Limited

Glyn Rhonwy Pumped Hydro Storage
Facility
Glyn Rhonwy former slate quarries
Cefn Du
Llanberis

Permit number

EPR/AB3392FB

Glyn Rhonwy Pumped Hydro Storage Facility

Permit Number EPR/AB3392FB

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The proposed hydro storage facility will result in the creation of two water reservoirs. This permit regulates 4 activities:

- Spillway operation at Quarry 1 (Q1)
- Spillway operation at Quarry 6 (Q6)
- Relief valve operation at Q1
- Relief valve operation at Q6

When the scheme is operational, it is not intended to release any significant volume of water from Q1 or Q6. That is, the scheme should operate entirely separately from the wider water environment. The primary mechanism for drawdown of Q1 is via the penstock to Q6, and vice versa for the drawdown of Q6.

The relief valve from Q1 to Nant y Betws, and from Q6 to Llyn Padarn would only be used where:

- i) The penstock is unavailable, and there is a need to lower the water level behind the dam.
- ii) Maintenance as required, as per dam safety legislation.

Both the Q1 and Q6 spillway may discharge to the Nant y Betws and Llyn Padarn (respectively) after a long period of no operational activity where the water then reaches the spill level. The need for a spillway at both reservoir is a requirement as per the Reservoirs Act.

Additionally, there may be up to 238,500m³ of annual net volume increase from rainfall across the two reservoirs, which is intended to be released via the relief valve from Q6 to Llyn Padarn. This will be done on an irregular basis (rainfall dependant) and at a rate not exceeding the drawdown rate i.e. 0.3m³/s from Q6.

The permit is effective as of 01/01/2020.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application EPR/AB3392FB	Duly made 08/09/2016	Application for discharge of trade effluent consisting of site drainage.
Permit determined	06/01/2016	Permit issued to Snowdonia Pumped Hydro Limited

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/AB3392FB

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Snowdonia Pumped Hydro Limited (“the operator”),
whose registered office is

c/o Stephenson Harwood
1 Finsbury Circus
London
EC2M 7SH

company registration number: **08644844**

to operate a water discharge activity at

Glyn Rhonwy Pumped Hydro Storage Facility
Glyn Rhonwy former slate quarries
Cefn Du
Llanberis

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Emily Roe	06/01/2016

Authorised on behalf of Natural Resources Wales

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharges shall be made at the points marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

2.3 Operating techniques

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.

- (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3 Emissions and monitoring

3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.3 Monitoring

- 3.3.1 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by Natural Resources Wales.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

4.3 Notifications

- 4.3.1 Natural Resources Wales shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and

- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) Natural Resources Wales shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 Activities

Activity reference	Description of activity	Limits of specified activity
A1	Discharge of trade effluent consisting of abstracted water and rainfall via the spillway at outlet 1	n/a
A2	Discharge of trade effluent consisting of abstracted water and rainfall via the spillway at outlet 2	
A3	Discharge of trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 1	
A4	Discharge of trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 2	

Table S1.2 Operating techniques

Activity reference	Description of documentation	Parts	Date Received
A1, A2, A3 & A4	Application Forms	<ul style="list-style-type: none"> Part A Part B2 Part B6 Part F2 	08/09/2016
	Supporting documents and plans	<ul style="list-style-type: none"> App B Excess water management strategy App C Environment Management System App D Risk Assessment App E H1 Assessment App F Biosecurity Plan App G Habitats Risk Assessment App H WFD Addendum 	

Schedule 2 - Waste types, raw materials and fuels

Wastes are not accepted as part of the permitted activities and there are no restrictions on raw materials or fuels under this schedule.

Schedule 3 – Emissions and monitoring

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements							
Activity reference	Discharge source and discharge point ref. & location	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
A1	Discharge of trade effluent consisting of abstracted water and rainfall via the spillway at outlet 1	Suspended solids (measured after drying at 105° C)	50 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
		pH	6 to 9	Instantaneous (spot sample)	N/A	N/A	Minimum and maximum
		Visible oil or grease	No significant trace present	Instantaneous (spot sample)	N/A	N/A	No significant trace
A2	Discharge of trade effluent consisting of abstracted water and rainfall via the spillway at outlet 2	Suspended solids (measured after drying at 105° C)	50 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
		pH	6 to 9	Instantaneous (spot sample)	N/A	N/A	Minimum and maximum
		Visible oil or grease	No significant trace present	Instantaneous (spot sample)	N/A	N/A	No significant trace

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Activity reference	Discharge source and discharge point ref. & location	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
A3	Discharge of trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 1	Suspended solids (measured after drying at 105° C)	50 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
		pH	6 to 9	Instantaneous (spot sample)	N/A	N/A	Minimum and maximum
		Visible oil or grease	No significant trace present	Instantaneous (spot sample)	N/A	N/A	No significant trace
A4	Discharge of trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 2	Suspended solids (measured after drying at 105° C)	50 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
		pH	6 to 9	Instantaneous (spot sample)	N/A	N/A	Minimum and maximum
		Visible oil or grease	No significant trace present	Instantaneous (spot sample)	N/A	N/A	No significant trace

Table S3.2 Discharge points			
Effluent Name	Discharge Point	Discharge point NGR	Receiving water/Environment
A1: trade effluent consisting of abstracted water and rainfall via the spillway at outlet 1	Q1	SH 55110 59660	Nant y Betws
A2: trade effluent consisting of abstracted water and rainfall via the spillway at outlet 2	Q6	SH 57290 61190	Llyn Padarn
A3: trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 1	Q1	SH 55110 59660	Nant y Betws
A4: trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 2	Q6	SH 57290 61190	Llyn Padarn

Table S3.3 Monitoring points			
Effluent(s) and discharge point(s)	Monitoring type	Monitoring point NGR	Monitoring point reference
trade effluent consisting of abstracted water and rainfall via the spillway at outlet 1	Effluent sample point	SH 55105 59937	A1
trade effluent consisting of abstracted water and rainfall via the spillway at outlet 2	Effluent sample point	SH 56766 60993	A2
trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 1	Effluent sample point	SH 55105 59937	A3
trade effluent consisting of abstracted water and rainfall via the relief valve at outlet 2	Effluent sample point	SH 56766 60993	A4

Schedule 4 – Reporting

There is no reporting under this schedule.

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit

To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

“accident” means an accident that may result in pollution.

“annually” means once every year.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, which are not controlled by an emission or background concentration limit.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

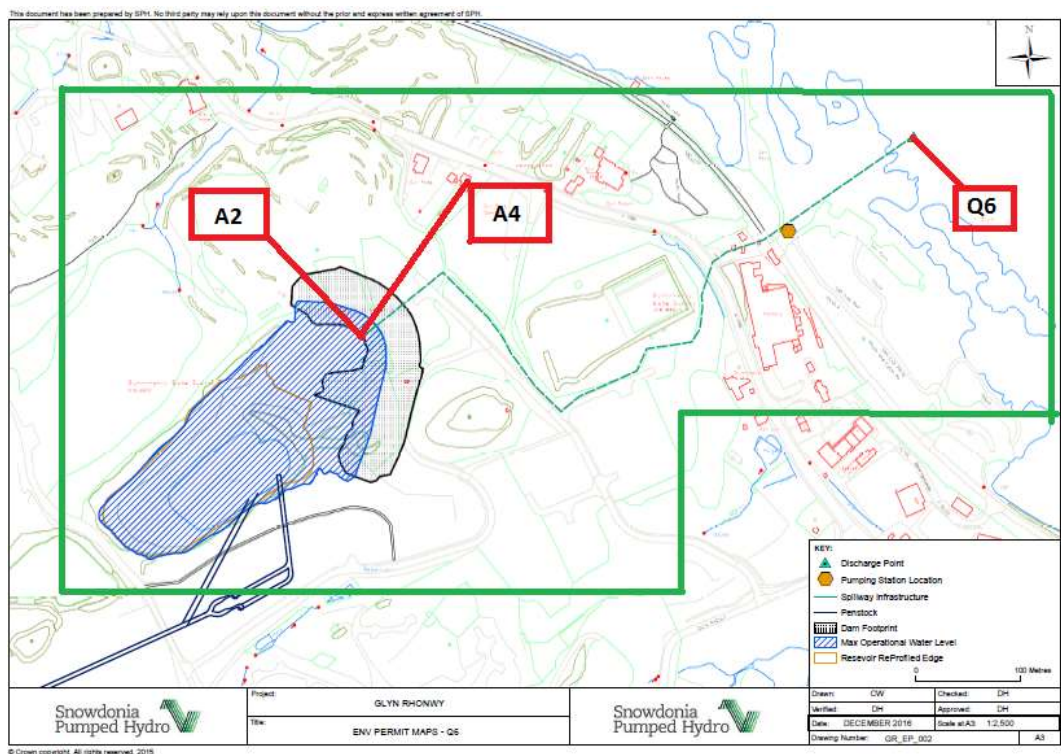
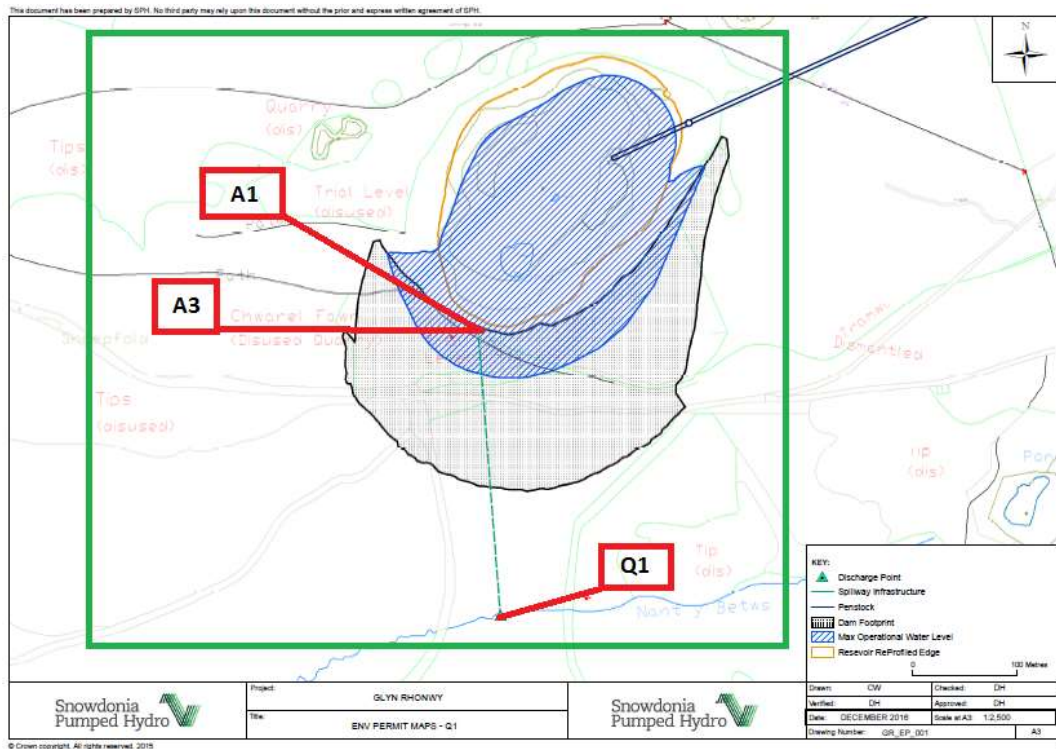
“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Natural Resources Wales” means the Natural Resources Body for Wales established by article 3 of the Natural Resources Body for Wales (Establishment) Order 2012. The Natural Resources Body for Wales (Functions) Order 2013 transferred the relevant functions of the Countryside Council for Wales, and functions of the Environment Agency and the Forestry Commission in Wales to the Natural Resources Body for Wales.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“year” means calendar year ending 31 December.

Schedule 7 - Site plan



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END OF PERMIT