# **Notice: Variation of Authorisation**

The authorisation detailed below is varied by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under regulation 22 of the Water Environment (Controlled Activities)(Scotland) Regulations 2011 ("the Regulations"). This Notice is issued in accordance with Regulation 24(4) of the Regulations.

Authorisation Number:	CAR/L/1123625
Authorised Person:	Blencathra Hydro Limited 09761685 Canal Head North Kendal Cumbria LA9 7BZ
Variation Number:	VAR01
Authorised Place:	River Pattack Hydro
Effective Date of Variation:	02/11/2022
Details of Variation:	The authorisation is varied as specified in the Schedule attached.

### Schedule

The authorisation is varied as follows:

- **1.** A contents page is added as attached to this schedule.
- **2.** The existing licence is deleted in its entirety and replaced with schedules 1-6 as attached to this schedule.

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# Schedule 1: The Authorised Person and Activities

**Purpose:** This schedule places responsibility on the authorised person to ensure compliance with the conditions of this authorisation and details the activities that can be carried out.

### 1.1 Duty of Authorised Person

1.1.1 The authorised person must ensure compliance with the conditions of this authorisation.

### **1.2 Authorised Activities**

- 1.2.1 The authorised activities are the abstraction of water from the water environment and the construction and operation of impounding works in surface water and wetlands necessary for hydro-electric power generation.
- 1.2.2 The authorised person must notify SEPA in advance of the date that impoundment 6 becomes operational.

# **Abstraction and Impounding Works**

**Purpose:** This schedule limits the location, scale and impacts from the abstraction and impoundment activities.

#### 2.1 Abstraction and Impounding works activities

- 2.1.1 The abstraction of water from the water environment and the construction and operation of impounding works in Table 1 must only be undertaken:
  - a) At the corresponding location; and
  - b) Subject to the corresponding controls;

specified in Table 1.

- 2.1.2 Abstracted water must be returned to the water environment at the corresponding return location specified in Table 1.
- 2.1.3 Returned abstracted water must not:
  - a) have a significant impact as a result of iridescence / sheen on;
  - b) cause significant erosion of the bed or bank and / or deposition of sediment in;

the water environment.

## Table 1Activity location and controls

Activity	Location and	Controls				
	NGR	Туре	Return location (NGR)	Maximum height of impounding works (m)	Maximum abstraction rate (m <sup>3</sup> /sec)	Maximum abstraction rate (m³/day)
Impoundment 1	River Pattack NN 5488 8307	n/a	n/a	18	n/a	n/a
Impoundment 2	Allt Mhainisteir NN 5307 8513	n/a	n/a	1	n/a	n/a
Impoundment 3	Allt Mhainisteir (central) NN 5310 8513	n/a	n/a	2	n/a	n/a
Impoundment 4	An Caochan Cuil NN 5338 8482	n/a	n/a	1	n/a	n/a
Impoundment 5	Allt Beinn Eilde NN 5535- 8335	n/a	n/a	1	n/a	n/a

Activity	Location and		Controls			
	NGR	Туре	Return location (NGR)	Maximum height of impounding works (m)	Maximum abstraction rate (m <sup>3</sup> /sec)	Maximum abstraction rate (m <sup>3</sup> /day)
Impoundment 6	River Pattack NN 5454 8121	Tilting weir	n/a	2	n/a	n/a
Abstraction 1	River Pattack NN 5488 8307	Hydro intake	Loch Laggan NN 5276 8858	n/a	4.5	388,800
Abstraction 2	Allt Mhainisteir NN 5307 8513	Hydro intake	Loch Laggan NN 5276 8858	n/a	0.07	6,048
Abstraction 3	Allt Mhainisteir (central) NN 5310 8513	Hydro intake	Loch Laggan NN 5276 8858	n/a	0.29	25,056
Abstraction 4	An Caochan Cuil NN 5338 8482	Hydro intake	Loch Laggan NN 5276 8858	n/a	0.1	8640
Abstraction 5	Allt Beinn Eilde NN 5535 8335	Hydro intake	Loch Laggan NN 5276 8858	n/a	0.08	6912

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### 2.2 Mitigation: Impoundments 2, 3, 4 and 5

2.2.1 During the corresponding period detailed in Table 2, for each abstraction specified in the table, water may be abstracted when the flow rate upstream of the abstraction location is greater than or equal to the flow rate in the fourth column of that table, but only to the extent that the flow rate immediately downstream of the abstraction location is greater than or equal to the flow rate specified in the fifth column of that table.

Name/Reference	Location and NGR	Period	Flow rate upstream (m <sup>3</sup> /second)	Minimum flow rate downstream (m <sup>3</sup> /second)
Abstraction 2	Allt Mhainisteir NN 5307 8513	All year	0.01	0.003
Abstraction 3	Allt Mhainisteir (central) NN 5310 8513	All year	0.04	0.015
Abstraction 4	An Caochan Cuil NN 5338 8482	All year	0.02	0.005
Abstraction 5	Allt Beinn Eilde NN 5535 8335	All year	0.01	0.004

#### Table 2Hands off flow

2.2.2 For each abstraction specified in Table 3, the corresponding minimum flow rate specified in the fifth column of the said table must, during the corresponding period for that abstraction, be delivered when the flow rate upstream of the abstraction location is at or above the flow rate specified in the fourth column of that table.



#### Table 3Residual Flow

Name/Reference	Location and NGR	Period	Flow rate upstream (m³/second)	Minimum flow rate downstream (m <sup>3</sup> /second)
Abstraction 2	Allt Mhainisteir NN 5307 8513	All year	0.038	0.008
Abstraction 3	Allt Mhainisteir (central) NN 5310 8513	All year	0.163	0.033
Abstraction 4	An Caochan Cuil NN 5338 8482	All year	0.055	0.011
Abstraction 5	Allt Beinn Eilde NN 5535 8335	All year	0.046	0.009

#### 2.3 Mitigation: Impoundment 1

- 2.3.1 A water level indicator must be provided at the impoundment 1 location detailed in Table 1.
- 2.3.2 The water level indicator must measure the water level below the crest of the impoundment spillway.
- 2.3.3 Subject to conditions 2.3.4 and 2.3.6, compensation water must be released downstream of each impoundment location in Table 4, during the corresponding period and at the minimum flow rate whenever the water level, as measured according to condition 2.3.2, is greater than or within the corresponding water level, specified in Table 4.



- 2.3.4 An additional volume of 576,000m<sup>3</sup> shall be available each year for release to the River Pattack, from impoundment 1, in volumes, of durations, on dates and at times to be agreed in writing with SEPA.
- 2.3.5 There must be no abstraction from Abstraction 1 as detailed in Table 1, when the water level, as measured in accordance with condition 2.3.2, is at or greater than 3m at the impoundment location specified in Table 4.
- 2.3.6 The compensation water flow rate released downstream of each impoundment location in Table 4, may be less than 0.726 m<sup>3</sup>/sec during any period when the flow rate upstream of this location is less than 0.726 m<sup>3</sup>/sec.

Activity Location Period Water level **Minimum flow** Name/Reference below the crest rate of the (m<sup>3</sup>/second) (NGR) impoundment (m) All Year >3 Impoundment River Pattack 0.726 1 NN 5488 8307 Impoundment River Pattack All Year 0-3 0.839 1 NN 5488 8307

Table 4Compensation water

### 2.4 Mitigation: Impoundment 6

- 2.4.1 A water level indicator must be provided at NN 5417 7972 to measure the water level at Loch Pattack.
- 2.4.2 Subject to condition 2.4.3, compensation water must be released downstream of each impoundment location in Table 5, during the corresponding period and at the minimum flow rate whenever the water level, as measured according to condition 2.4.1, is greater than or less than the corresponding water level, specified in Table 5.

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2.4.3 The compensation water flow rate released downstream of each impoundment location in Table 5, may be less than 0.612 m<sup>3</sup>/sec, during any period when the natural flow rate upstream of this location is less than 0.612 m<sup>3</sup>/sec.

Table 5	<b>Compensation water</b>
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	Location Name/Reference (NGR)			Minimum flow rate (m³/second)
	River Pattack NN 5454 8121	All Year	<423.5	0.612
Impoundment 6		All Year	423.5	0.753

- 2.4.4 The operation of the tilting weir, as detailed in Table 1, must not cause harm to fish.
- 2.4.5 The tilting weir, as detailed in Table 1, must be operated so as to ensure that the loch level at Loch Pattack, at the location specified in Condition 2.4.1, is maintained at or below 423.5m AOD.

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### 2.5 Fish Screens

- 2.5.1 Fish screens for preventing the passage of fish (including smolt, in the case of intakes) must be provided:
  - a) at the corresponding structure;
  - b) at the corresponding location; and
  - c) during the corresponding period;

specified in Table 6.

Table 6 F	ish screen; structure,	location and period
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Structure	Location and National Grid Reference (NGR)	Period	
Abstraction 1 hydro intake	River Pattack	All year	
	NN 5488 8307		
Abstraction 2	Allt Mhainisteir		
hydro intake	NN 5307 8513	All year	
Abstraction 3	Allt Mhainisteir (central)	Allycor	
hydro intake	NN 5310 8513	All year	
Abstraction 4 hydro intake	An Caochan Cuil	All year	
nyuro intake	NN 5338 8482		
Abstraction 5	Allt Beinn Eilde	All year	
hydro intake	NN 5535 8335		
Pattack Hydro	Loch Laggan		
scheme return tailrace	NN 5276 8858	All year	

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#### 2.6 Fish passage downstream

- 2.6.1 There must be a plunge pool installed immediately downstream of impoundment 6:
  - a) at the corresponding location; and
  - b) subject to the corresponding controls;

specified in Table 7.

Table 7Plunge pool location and controls

	Location and	Controls		
Activity	National Grid Reference (NGR)	Minimum Width (m)	Maximum vertical drop (m)	Minimum plunge pool depth (m)
Impoundment 6	River Pattack NN 5454 8121	No less than 30m	2.0	0.667

2.6.2 There must be no vertical step between the exit from the plunge pool detailed in Table 7 and the existing bed level.

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# **Construction works**

**Purpose:** This schedule limits the timing and impact of construction works on the water environment. Descriptive conditions cover impacts that may arise from pollution. Temporary works must be removed and the water environment must be restored to at least its previous condition.

### 3.1 Construction works

- 3.1.1 Construction works associated with the authorised activities in Table 1, any associated and/or dependent structures or engineering activities and/or the installation and/or removal of temporary structures, must not have a significant impact on the water environment as a result of:
  - a) Iridescence /sheen;
  - b) Discolouration;
  - c) Deposition of solids;
  - d) Increased foaming.
- 3.1.2 Construction works associated with the authorised activities in Table 1, any associated and/or dependent structures or engineering activities and/or the installation and/or removal of temporary structures, must not;
  - a) cause significant erosion of the bed or bank and/or significant deposition of sediment in the water environment;
  - b) cause harm to freshwater pearl mussels;
  - c) cause harm to fish;
  - cause the spread of invasive non-native species within the water environment;
  - e) prevent the passage of migratory fish; or
  - f) have a significant adverse impact on private drinking water supplies.



- 3.1.3 Construction works and the installation and/or removal of temporary structures in the wetted part of inland waters associated with the authorised activities in Table 1 and any associated and/or dependent structures or engineering activities, must:
  - a) only be undertaken where it is impracticable to complete the works otherwise; and
  - b) not be undertaken during the period in which fish are likely to be spawning nor in the period between spawning and the subsequent emergence of juvenile fish.
- 3.1.4 Construction works and/or temporary structure on the bed or banks of inland waters associated with the authorised activities in Table 1 and any associated engineering activities must be removed as soon as reasonably practicable after completion of the activities.

#### 3.2 Restoration

- 3.2.1 Where the channel, bed or banks immediately adjacent to the authorised activities in Table 1 have been adversely impacted by the works, they must be restored to at least their previous condition as soon as reasonably practicable.
- 3.2.2 Where the channel, bed or banks have been adversely impacted by any associated and/or dependent structures or engineering works and/or the installation and/ or removal of temporary structures, they must be restored to at least their previous condition as soon as reasonably practicable.

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# **Environmental Events**

**Purpose:** This schedule requires the cessation, prevention and reporting of any potentially polluting event that may arise from the authorised activities.

### 4.1 Notification of SEPA

- 4.1.1 SEPA must be notified via its pollution hotline contact telephone number as soon as reasonably practicable, and in any case within 24 hours of identification of an event, of any of the following:
  - a) An event that has caused or could cause adverse impact to the environment or harm to human health;
  - b) An event that results, or could result, in an emission to the environment that is not authorised;
  - c) An event that has caused a breach of a condition of this authorisation.

In this condition, the meaning of 'event' is as defined in the Interpretation of Terms in schedule 6 of this authorisation.

### 4.2 Management of the Event

4.2.1 All measures that are reasonably practicable must be taken to stop an event and to minimise its effect on the environment.

### 4.3 Reporting of the Event

- 4.3.1 Within 14 days of an event a report must be submitted to SEPA detailing:
  - a) The reason(s) for the event;
  - b) The action(s) taken to stop the event and minimise the impacts; and
  - c) The action(s) taken to prevent the event from recurring.

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# **Record Keeping and Data Submission**

**Purpose:** This schedule requires the authorised person to keep records of specific activities carried out and to provide SEPA with specified information at regular intervals.

### 5.1 Record Keeping

- 5.1.1 All information recorded, kept or submitted to SEPA in accordance with a condition of this authorisation must be:
  - a) True and accurate;
  - b) Kept for a minimum of six years; and
  - c) Provided to SEPA upon request.
- 5.1.2 Records must be kept of:
  - a) the total daily abstracted volume of water; or
  - b) when there has been no daily abstraction,

for each abstraction in Table 1.

#### 5.2 Data Submission

- 5.2.1 The records detailed in 5.1.2 must be submitted to SEPA:
  - a) Annually no later than the 31<sup>st</sup> January each year; and
  - b) Via email to <u>WRDataReturns@sepa.org.uk</u> in the excel spreadsheet supplied by SEPA<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Electronic Data Return forms can be found at: <u>www.sepa.org.uk/regulations/water/abstractions</u>

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# Interpretation of Terms

For the purposes of this authorisation, and unless the context requires otherwise, the following definitions apply.

Term	Definition
abstraction	The removal or diversion of water by mechanical means, pipe or any engineering structure or works from any part of the water environment.
authorisation	The water use licence granted by SEPA under <u>The Water</u> <u>Environment (Controlled Activities) (Scotland) Regulations</u> <u>2011</u>
authorised activities	The activities which may be carried on under this authorisation.
authorised person	The holder of this authorisation, and person responsible for securing compliance with the conditions of it.
authorised place	The geographic location or locations at which the authorised activities may be carried on.
bed level	The level of the bed of a watercourse relative to a specific point
compensation flow	A minimum flow rate downstream of an impoundment
construction works	The carrying out of any building, civil engineering or engineering construction works, including the clearance or preparation of the site.
	<ul> <li>any accident which has caused or could cause environmental harm; or</li> </ul>
event	<ul> <li>any malfunction, breakdown or failure of plant, infrastructure or techniques which has caused or could cause environmental harm; or</li> </ul>
	• force majeure or action taken to save human life or limb.
freshet	A high volume of water released for a defined period, downstream of an impoundment
hands off flow	a specific flow in the river when abstraction must cease
	means the height as measured from the lowest
height of impounding works	downstream point of the impounding works to the highest
WUINS	point of the impounding works.
relation to surface water, (a) any dam, weir or other water by which surface water may be impounded or any water impounding works diverting the flow of water in connection with the construction or alteration of any dam, weir or other water falling within (a).	

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Term	Definition
inland water	All standing or flowing water on the surface of the land (other than transitional water) and all groundwater, within the landward limits of coastal water.
	Includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices and passages through which water flows and includes artificial watercourses and underground watercourses.
residual flow	a variable flow, above the hands off flow, downstream of an intake
SEPA	Scottish Environment Protection Agency.
water level	The level of water relative to a specific point.
water environment	All surface water, groundwater and wetlands.
watercourse	Includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices and passages through which water flows and includes artificial watercourses and underground watercourses.
wetland	An area of ground the ecological, chemical and hydrological characteristics of which are attributable to frequent inundation or saturation by water and which is directly dependent, with regard to its water needs, on a body of groundwater or a body of surface water

Except where specified otherwise, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of the authorisation) and to any other enactment, which may after the date of the authorisation replace or amend it.