

Glyn Rhonwy Pumped Storage Development Consent Order

Deadline 5 – Schedule of Other Plans and Strategies (Revision 2)



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Abbreviations & Glossary

Applicant	Snowdonia Pumped Hydro
CDM	Construction (Design and Management) Regulations 2015
CEMP	Construction Environmental Management Plan
CoCP	Code of Construction Practice
DCO	Development Consent Order
ECoW	Environmental Clerk of Works
ES	Environmental Statement
HASP	Health and Safety Plan
m ³	metres cubed
MAP2	Management of Archaeological Projects
MMP	Materials Management Plan
MWe	Mega Watts Electrical – measure of energy, one million watts
n/a	Not Applicable
NSIP	Nationally Significant Infrastructure Project
NRW	Natural Resources Wales (formally EAW and CCW)
Order Limits	The site boundary denoted by a red line
PC	Principal Contractor
TPO	Tree Preservation Order
WMP	Waste Management Plan

Revision	Date	Amends	Revised By:	Approved By:
1 – First Written Questions	April 2016	FWQ Appendix 2.24 and 2.25	DM	CA
2 – Deadline 5	June 2016	Update in line with Draft and Outline Plans	DM	CA

1 INTRODUCTION

1.1 INTRODUCTION

- 1.1.1 Snowdonia Pumped Hydro (“the Applicant”) has submitted an application for a Development Consent Order (“DCO”) for a pumped storage facility known as Glyn Rhonwy Pumped Storage. The generating capacity of the Development exceeds 50 megawatts (MWe) and it is therefore designated as a Nationally Significant Infrastructure Project (“NSIP”) under the Planning Act 2008.
- 1.1.2 This document was prepared for the DCO application to comply with the requirements of Regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 and in accordance with the Department for Communities and Local Government guidance ‘Planning Act 2008: Application Form Guidance’ and the Planning Inspectorate Advice Note 6 on Preparation and Submission of Application Documents.
- 1.1.3 This document sets out the minimum standards to be adopted when constructing the Development; it forms part of a suite of application documents and other Management Plans which should be read alongside them.
- 1.1.4 The objective of this Schedule of Other Required Plans and Strategies is to provide initial information on how potential construction stage environmental impacts are to be minimised. The document provides minimum requirements rather than construction detail, as the Principal Contractor (PC) has not yet been instructed. Once a PC is in place the plans and strategies set out herein will be finalised and submitted to Gwynedd Council (in consultation with Natural Resources Wales (NRW)) for their approval. The need for this approval is secured under Requirement 7 of Part 2 in Schedule 1 of the DCO.

- 1.1.5 Some of these plans and strategies will remain live documents throughout the construction phase and will be regularly reviewed to take into account additional environmental information encountered during the construction phases; however at all times the minimum standards identified in the Schedule or the relevant plan or strategy will be complied with.
- 1.1.6 All personnel and sub-contractors working on the Development will perform their duties in accordance with the requirements of the Schedule and its associated plans and strategies. The Environmental Manager / Environmental Clerk of Works (ECoW) will report regularly to the Project Manager on the status and effectiveness of its implementation.
- 1.1.7 Table 1.1 outlines the status of the following topic-specific management plans which are to be secured via Requirement 7:

Table 1.1 Table of Topic-Specific Management Plans		
Management Plan	Status	Reference
Air Quality Baseline Monitoring Plan	Draft	SPH_GREX_DCOD5_02
Materials Management Plan	Outline in this Schedule	SPH_GREX_DCOD5_07
Ordnance Management Strategy	Draft	SPH_GREX_DCOD4_01 (Rev1)
Archaeological Compensation and Enhancement Strategy	Outline in this Schedule	SPH_GREX_DCOD5_09
Land Discovery Strategy	Outline in this Schedule	SPH_GREX_DCOD5_08
Health and Safety Plan	Outline in this Schedule	SPH_GREX_DCOD5_10
Biosecurity Plan	Draft	SPH_GREX_DCOD3_05 (Rev1)

- 1.1.8 All the Management Plans which are labelled as Draft are provided separately as these have been advanced past the inclusion of minimum contents as outlined in this Schedule. All other remaining Management

Plans outlined in this Schedule have their minimum contents outlined in Section 2.

- 1.1.9 These plans will be finalised by the PC and agreed with Gwynedd Council through the submission of the final plan or strategy for approval, as per Requirement 7.
- 1.1.10 As part of the planning permission for the approved scheme (Planning Reference: C12/1451/15/LL) a number of conditions were set by Gwynedd Council including the requirement for a Construction Environmental Management Plan (CEMP). This has developed into the Code of Construction Practice (CoCP) which accompanied the DCO application, and also this Schedule.

2 TOPIC SPECIFIC MANAGEMENT PLANS AND STRATEGIES

2.1 INTRODUCTION

2.1.1 The following sections provide further information on the Outline topic-specific Management Plans to be secured through Requirement 7 as outlined in Table 1.1.

2.1.2 The Schedule of Mitigation provides a composite of mitigation for all phases of the Development including all the mitigation reported in the ES and those developed through the examination process as the specific Management Plans have evolved. The Schedule also outlines the hierarchy of the Management Plans and the responsibility for their completion, approval and compliance.

2.2 MATERIALS MANAGEMENT PLAN

2.2.1 The preparation of a detailed Material Management Plan (MMP) is to be finalised and approved prior to construction commencing as per Requirement 7.

2.2.2 Approximately 810,000m³ of excess material will be generated from the Development, around 650,000m³ of which will be transported to the new excess spoil mounds at Q1 from Q6. A conveyor connection in the penstock will facilitate this movement of material between the quarries and is not anticipated to have any additional effects.

2.2.3 All excavated material will be graded with only suitable material utilised in the construction of the dam, with less suitable material used for landscaping purposes or incorporated into the existing spoil mounds.

2.2.4 The spoil mounds located to the south west of Q1 will be designed to minimise any visual impact and have been designed to encourage natural re-colonisation of vegetation, where practical. Slate waste will also be re-used on site wherever reasonably practicable to create access tracks

- 2.2.5 Slate crushing will be required on site and therefore suitable mitigation measures will be implemented to prevent runoff, such as settlement lagoons.
- 2.2.6 The re-use of slate waste has already been successfully undertaken during the extension of the upper storage reservoir, Marchlyn Mawr, at Dinorwig hydroelectric power station. During these works the embankment level was raised by 1.3m using locally derived slate waste. This construction method will help to ensure that waste will not need to be disposed of at an alternative location and demonstrates adherence to the waste hierarchy.
- 2.2.7 Subject to geotechnical testing, all excavated materials will be re-used on site wherever reasonably practicable and any contaminated material requiring remediation will be treated onsite where it is reasonably practicable to do so. However, if it is not possible to reuse or remediate material onsite, a licensed off-site waste disposal facility will be used and waste will be disposed of in accordance with the Waste Management Plan (WMP).
- 2.2.8 The waste wood and foliage material resulting from the removal of trees will be managed in-line with the Waste Hierarchy as detailed within the Waste Framework Directive, thus helping to minimise potential environmental issues pertaining to this process.
- 2.2.9 Wherever feasible, the generation of tree and foliage waste will be prevented and these features will be retained in-situ, especially as part of the Development site is subject to a Tree Preservation Order (TPO) which includes groups and woodland areas as well as individual trees.
- 2.2.10 However, the retention of trees and foliage will not always be possible; therefore the reuse of material on site will be explored wherever practicable, with wood material either reused in construction, or within landscaping aspects such as the use of wood chippings, or as mulch to enhance soil quality to aid the re-planting of trees.
- 2.2.11 Should this not prove to be a viable option for all generated material, then excess wood waste will be stored under cover, such as tarpaulin, to protect wood from the weather so that it may be re-used wherever possible off-site

e.g. as carpentry material or offered to the local community for fire wood and biomass.

2.2.12 Attention will also be paid to the proximity principle, with local uses for waste materials considered where this represents the best practicable environmental option. For all material that cannot be re-used on or off site, or recycled, then elements of the wood and foliage material can be converted into wood-chip. Through following this process, it will be possible to limit the volume of tree and foliage waste sent for disposal as far as practicably possible. Discussions have been undertaken with Minerals and Waste department of Gwynedd Council regarding this matter and the above agreed.

2.3 ARCHAEOLOGICAL COMPENSATION AND ENHANCEMENT STRATEGY

2.3.1 Where reasonably practicable surviving remains associated with the former industrial use of the area will be avoided and left in situ. Where this is not possible a full programme of archaeological and building recording will be in place to provide a record of the structures/remains. This will be undertaken alongside a landscape survey so that the surviving remains are recorded in context with surrounding associated features. Archaeological evaluation and excavation will also be required in addition to the recording of any features affected.

2.3.2 Other areas, including the associated infrastructure and access tracks, will be subject to an archaeologically monitored topsoil strip to ensure that any previously unrecorded features are excavated and recorded.

2.3.3 No development (including any ground disturbance works or site clearance) shall take place other than in accordance with a Written Scheme of Investigation which has been submitted by the applicant and agreed in advance by the archaeological advisor to Gwynedd Council. The specification must meet all relevant archaeological standards. The format of the archaeological programme will follow that detailed in Management of Archaeological Projects (MAP2).

2.3.4 Prior to any work commencing (including any ground disturbance works or site clearance) the Applicant shall submit to and receive written approval from Gwynedd Council for any archaeological compensation and enhancement measures. The approved strategy will be fully implemented by the Applicant and all development shall subsequently be carried out in strict accordance with the approved strategy as per Requirement 7.

2.4 LAND DISCOVERY STRATEGY

2.4.1 The Land Discovery Strategy will manage any previously unidentified areas of contaminated ground discovered during the construction phase of the Development. This would be produced between the Applicant and the appointed PC, and will require the approval of Gwynedd Council under Requirement 7.

2.5 HEALTH AND SAFETY PLAN

2.5.1 Site specific risk assessments and method statements will be undertaken in accordance with the applicable legislation prior to the commencement of activities within the Order Limits; to identify any potential risks, assess their likelihood and significance, and to identify mitigation measures to be implemented to ensure the safety of workers and the general public.

2.5.2 Site security during the construction phase will be strict. Access to the site will be prevented by the use of temporary fencing to prevent unauthorised access. A compound for the temporary storage of equipment or materials will be provided. This will be locked with restricted access. Security staff will be utilised as appropriate.

2.5.3 The Applicant will ensure that adequate arrangements are in place for the discharge of all duties under the Construction (Design and Management) Regulations 2015 (CDM).

2.5.4 A Health and Safety Plan (HASP) will be prepared by the contractor, which will set out how all health and safety matters on site and within the Order Limits are to be managed and how risks are to be identified and managed in accordance with current good practice and legal requirements. The HASP will focus on the health and safety of construction workers; however,

the PC will also be responsible for ensuring the health and safety of any visitors to the site and of the general public. The HASP will contain, but not be limited to the following:

- Working from height;
- Working near water;
- Working in confined spaces;
- Blasting;
- Emergency response;
- Fires;
- Spills or leakages;
- Falling equipment;
- Public safety;
- Noise and Vibration;
- Security fencing and lighting;
- Vehicle and plant movement; and
- Construction traffic.

2.5.5 All staff working on site and within the Order Limits will undergo a site induction. Staff will be briefed on a daily basis prior to work commencing. Project managers and CDM controllers will carry out audits throughout the project.

2.5.6 A Health and Safety Plan (HASP) will be finalised by the PC once appointed in compliance with Regulation 7 of the DCO.