**Prior Information Notice – Cwm Rheidol Phase 2 Works**

This notice is not a call for competition - The Coal Authority intends to issue the call for competition on or after 6th September 2021.

Supplier engagement notification

Prior to starting the formal tendering process, The Coal Authority will host a supplier engagement event via Zoom.

The purpose of these events are to provide further information about this requirement, the tendering process, and to invite feedback and questions from potential bidders.

Dates/times:

Wednesday 18th August 2021 – 10:00

Interested parties should email Jacob Collishaw - JacobCollishaw@coal.gov.uk to book a place or if there are any queries about this requirement.

Background

Abandoned metal mines are significant sources of metals pollution to surface waters, particularly as a result of polluted mine water discharges. Elevated levels of metals from these discharges, primarily zinc, lead and cadmium, can have a detrimental impact on the ecology of river systems, reducing fish populations and the diversity of invertebrate fauna. There are more than 1,300 abandoned metal mines in Wales polluting more than 600km of river reaches, making them the single biggest cause of water quality objective failures. The Cwm Rheidol project forms part of a wider programme of works, which are intended to reduce river pollution and help restore river health downstream, directly contributing to the sustainable management of natural resources in Wales as detailed in the Environment (Wales) Act 2015 and the Well-being of Future Generations (Wales) Act 2015.

As a result of the above, National Resources Wales (NRW) commissioned The Coal Authority (CA) to assess the risks at a number of abandoned mine sites, with Adit 9 at Cwm Rheidol being the most significant and critical risk identified to date.

History

The Cwm Rheidol metal mine complex is located approximately 15km east of Aberystwyth and includes the mines of Cwm Rheidol, Ystumtuen, Penrhiw, Bwlchgwyn and Llwynteifi. These four mines were all connected underground, enabling the extensive workings to drain to the Afon Rheidol via Adits 6 and 9, which emerge on the steep valley slopes at the Cwm Rheidol mine site. The Afon Rheidol flows westwards past the Cwm Rheidol site, discharging directly into the sea at Aberystwyth.

Today the abandoned underground workings continue to drain from Adits 6 and 9, with both discharges being highly acidic (pH<3), containing significantly elevated concentrations of metals including zinc, lead and cadmium, and discharging some 9 tonnes of metals in to the Afon Rheidol annually.

There has been a history of minewater blow-outs at Cwm Rheidol, both from Adit No.9 and Adit No.6

Requirement Overview

Blow-out risk assessment reports have concluded that there is a potentially high risk of blow-out at Adit No.9 due to an existing blockage in, and progressive collapse of, the existing adit between the adit portal and rockhead.

The principle objective of the Cwm Rheidol blow-out mitigation works is to reduce or permanently remove the risk of a minewater blow-out at Adit No.9.

The Coal Authority on behalf of Natural Resources Wales (NRW) have undertaken a study to assess the risk and magnitude of a potential blow-out and concluded that there is a risk that up to 2,112m3 of water could blow-out of the adit portal at any time.

A two phased approach is proposed to mitigate this risk;

Phase 1 – The construction of a 2,112m3 capacity dry lagoon and engineered channel to convey any blow-out water from Adit No. 9 to the lagoon. Phase 1 is being carried out under the NRW framework

Phase 2 - Draining down the adit and preventing future blow-out risk by introducing a permanent drain through the blockage in the adit and stabilising the roof. Phase 2 will be tendered under NEC4 contract conditions.

**Please note that this Prior Information Notice is for works to be undertaken as part of Phase 2 only.**

Requirements of Phase 2 works:

* To design and install a clear drainage path of minimum 300mm clear diameter into the adit as far as rockhead
* Include some form of redundancy (backup) such as twin pipes or equivalent
* Design life 50 years
* Infrastructure to be protected from further roof collapse
* Infrastructure resistant to the chemical and pH characteristics of the mine water
* Stabilisation of the adit roof structure such that further collapses are prevented
* Reconstruction of any adit infrastructure at at the portal to replicate the historical mine portal
* The works at adit 9 will include entry of persons into the adit and /or removal or alteration of mine infrastructure, therefore the works will fall under the Mines Regulations 2014 rather than the Construction Design and Management Regulations 2015

**About the buyer**

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