

PLANNING CONSENT P2014/0729

**ENERGYBUILD Ltd.
(Or the Operating Company)**

**ABERPERGWM COLLIERY
SCHEME FOR THE REMEDIATION OF THE ROCK TIP LAGOONS AND THEIR ENVIRONS**

AUGUST 2021

CONDITION 71, Within 12 months of the date of re-commencement of underground operations at the mine as notified in accordance with Condition 3 above, a remediation plan for the RockTip (shown coloured blue on Drawing Number CA10605-002) shall be submitted to and approved in writing by the Local Planning Authority. The remediation plan shall include inter alia a scheme of surface water drainage control and shall be implemented as approved.

Reason

To address an outstanding liability in the interests of the environment

SCHEME FOR THE REMEDIATION OF THE ROCK TIP LAGOONS AND THEIR ENVIRONS

INTRODUCTION

This scheme serves the purposes of Condition 71 of planning Consent P2014/0729. It deals with Energybuild's provisions for remediation plan for the RockTip (shown coloured blue hatch/boundary on Drawing Number CA10605-002 It deals with the refurbishment and reconstitution of the Rock Tip Lagoons and associated drainage channels and ditches. As shown on **Plan 2. EB-RTL-S21- ROCK LAGOONS AND THEIR ENVIRONS**

It also details the assessment and investigation of the wider area within the blue line boundary for the consideration for the requirement of any further restoration or management measures which may be needed.

SITE DESCRIPTION AND DRAINAGE FEATURES.

The rock tip area lies approximately 500m north east of the main mine site. The planning area is the result of a legacy planning consent associated with a previous operator. Although planning has been held for the area since approx. 1996 no specific purpose has been designated and no development activities have been carried on throughout the period to date. Refer to Plan No. **CA10605-002, Plan 1**, for general location and orientation.

The terrain raises steeply from the Rock Lagoon which are sited at the lower southern extremity of the site, the area is interspersed with formal concrete drainage channels and drainage ditches. **Refer to EB-RTL-S21- ROCK LAGOONS AND THEIR ENVIRONS**

2. There is evidence for presence of historic mining associated activities together with the presence of coal spoil within the blue line boundary.

The site has good natural regeneration of mature birch woodland which is a precursor of the establishment of natural oak woodland. **PLEASE REFER TO APPENDIX 1 ECOLOGICAL REPORT.**

The drainage features which intersect the site are heavily silted with many years of accumulated debris. The concrete drainage infrastructure appears to be structurally sound and in good condition apart from the cleaning requirement. The two parallel lagoons themselves are obliterated by a thick blanket of silt thickly overgrown with saplings and brush.

The parallel setup lagoons are constructed on an approximately east west orientation. The eastern lagoon accepts drainage water from the eastern extremity of the boundary area and also and substantially beyond in approximately north easterly direction. The concrete drainage channels are heavily silted with a high degree of ochre silt. Above the point at which easterly drainage channel meets the lagoon a minor slip of tip material has broken

away, probably due to short circuited water flow at its base, and has enveloped the drainage channel and the northern end of the lagoons. The infeed water by passes the drainage channel, due to the blockage at a higher point and flows down the eastern periphery of the area and onto a track that runs to the east away from the site.

The western lagoon is again heavily silted to a point where the lagoon structure is not discernible. The lagoon accepts water from the western area within the blue line boundary and from the greater part northern areas above both lagoons. The water from this area is clean and is separate from the eastern input and discharge through its intended discharge point. **Refer to Plan 3– CONDITION OF ROCK LAGOONS PRIOR TO REMEDIATION**

REMEDIATION PLAN FOR THE ROCK TIP AREA.

The following procedures and works will be carried out for the remediation of the Rock Tip lagoons and associated drainage features.

1. Initial site investigation.
2. Ecological survey of lagoon area and greater area within the blue line/blue hatched boundary area and also access road. **Refer to Plan Reference CA20605-002.** Please refer also to the **Ecological Management and Monitoring Plan Appendix 1**

The site has good natural regeneration of birch woodland which is a precursor of the establishment of natural oak woodland with the minimum of intervention and management.

Given the lack of protected species, bat roosting sites and as the bird nesting season has finished, there is no ecological reason why the proposed works cannot proceed within the identified lagoon area.

A watching brief will be maintained over the area to record any invasion of non-native species and any resultant management work carried out relevant details and actions taken will be recorded.

3. Refurbishment of existing farm track and form ADT turning area at eastern end. The track will be bolstered by sheeting with a layer of stone placed on geotextile. The farm track originally served the now derelict Pen Star farm. It runs generally in an east west direction for a distance of approximately 500m from The Aberpergwm Mine surface area to the rock lagoons.
4. Access lagoon area. Initial brush tree cutting
5. Silt and debris clearance to commence on eastern lagoon and subsequently eastern infeed ditches. The lagoon system is provided with a diversion facility built into the concrete drainage channel infrastructure. This arrangement allows the infeed drainage water to be channelled to either lagoon to allow maintenance to be carried

out on the other. As the lagoon system operates on a parallel principle each lagoon can be isolated independently of the other.

Pollution prevention measures will be utilised as required. The discharge of the lagoon being worked on will be sealed, straw bales, silt booms, silt matting and fencing will be isolate any spillages or leakages during the desilting operation. Over pumping via silt bags if necessary will be practiced where any accumulations of water build up in the lagoon being worked on arise. All ADT's will be fitted with tail boards to prevent spillage during transport.

When clearance work on the eastern lagoon and infeed ditches is complete the drainage flow will be diverted into it and the procedure repeated for desilting and clearing the western lagoon.

When works are complete the lagoon area and its approaches will be securely fenced and sign posted to prevent inadvertent access

The arisings from the desilting operation will be transported to the Mine Waste Repository. A purpose built receptacle cell has been constructed which will receive and contain the arisings until the material has dried and consolidated. When dry it will gradually be incorporated into the mix of mine waste and deposited within the repository.

MONITORING AND MAINTENANCE OF SURFACE WATER DRAINAGE ARRANGEMENTS

The ongoing provisions for routine examination of the water treatment facilities will fall under the formalised general inspection and maintenance at the mine. Inspection frequencies and type for each installation are held on a central database. Inspection requirements are flagged at the appropriate times and dates and paper check sheets issued to the persons responsible for performing the inspections at the appropriate time.

General maintenance will be carried out as defined within the inspection reports and action Instruction sheets. Broadly the main points for consideration are detailed below:

- De-silting of catchment pits and lagoons. Catchment pits and lagoons will be desilted when they reach 50% of their capacity or otherwise on an annual basis. Vigilance will be maintained by means of the inspection and monitoring regime on the rate of accumulation of silt. Lagoons will be desilted during the drier summer periods in preparedness for inclement winter periods.
- Subsequent to any adverse weather event the drainage system, lagoons, ditches, culverts and all other drainage features will be thoroughly inspected, and corrective measures carried out immediately should any be required.
- The Ecological **Management and Monitoring Plan (EMMP) Appendix 1** will be applied to the whole area it covers all aspects of the ecological management, including:
 - Details of ecological surveys undertaken and the results of these surveys.
 - Measures to protect species and habitats during site preparation, construction and occupation.

- Measures to increase the ecological value of the site once the development is complete, to ensure a net gain for biodiversity.

- Measures to ensure the biodiversity value of the site is maintained for the long term (5 years +) after development is complete, including a monitoring programme. The developer and / or site manager will ensure the EMMP is handed over and explained to any operatives or staff responsible for works that might impact upon the conservation interest of the Site.

The provisions contained within the plan (**EMMP**) for maintenance purposes again will be applied to the whole area. The plan requirements will be discussed during the quarterly **Site Ecological Steering Committee meetings**. Examples of potential management interventions are shown below.

Acid grassland/lichen-bryophyte heath on restored ground

Breeding birds: Hole-nesting species.

Lagoons and ponds

Actions specific to the needs of protected species

Japanese knotweed eradication

Rhododendron eradication

CONCLUDING CONSIDERATIONS

The remediation works on the lagoon area and associated drainage infrastructure have been completed. Consequently this scheme was finalised after the works were completed.

On entering the area for preliminary investigation and brush clearance for the quantification and planning of the proposed remediation of the lagoon area (As agreed with the local Authority) it was established that the condition of the now exposed lagoon area would present a serious danger to public safety due to the exposed volume of silt and unconsolidated material. It was decided at this time and due to the factors detailed above to proceed and complete the remediation works on the lagoons and drainage infrastructure to provide a safe and environmentally stable condition.

Prior to remediation, although in sound structural condition the drainage features, lagoons, formal drainage channels and gutters were heavily silted and blocked at intervals by fallen trees, branches and other obstructions causing overtopping and leakage from drains and lagoons.

All drainage features have now been cleared of all obstructions and silt and all drained water is taking the correct path and exiting the lagoons at the appropriate discharge point. The system is now refurbished and operating efficiently probable to original design parameters and is well able to cope with the heaviest water flows.

The wider site area above the lagoon area has good natural regeneration of mature birch woodland which is a precursor of the establishment of natural oak woodland. **Please refer to Appendix 1 Ecological report.**

The base of the tip flush has developed a rich wetland grass vegetated area which will be kept in good condition by small scale scrub clearance.

The lagoons and surrounding area which have been recently restored have provided a source of open water and marginal vegetation which will be of great benefit to wetland species.

Signed

Date 27TH October 2021

A handwritten signature in black ink, appearing to read 'J N Price'.

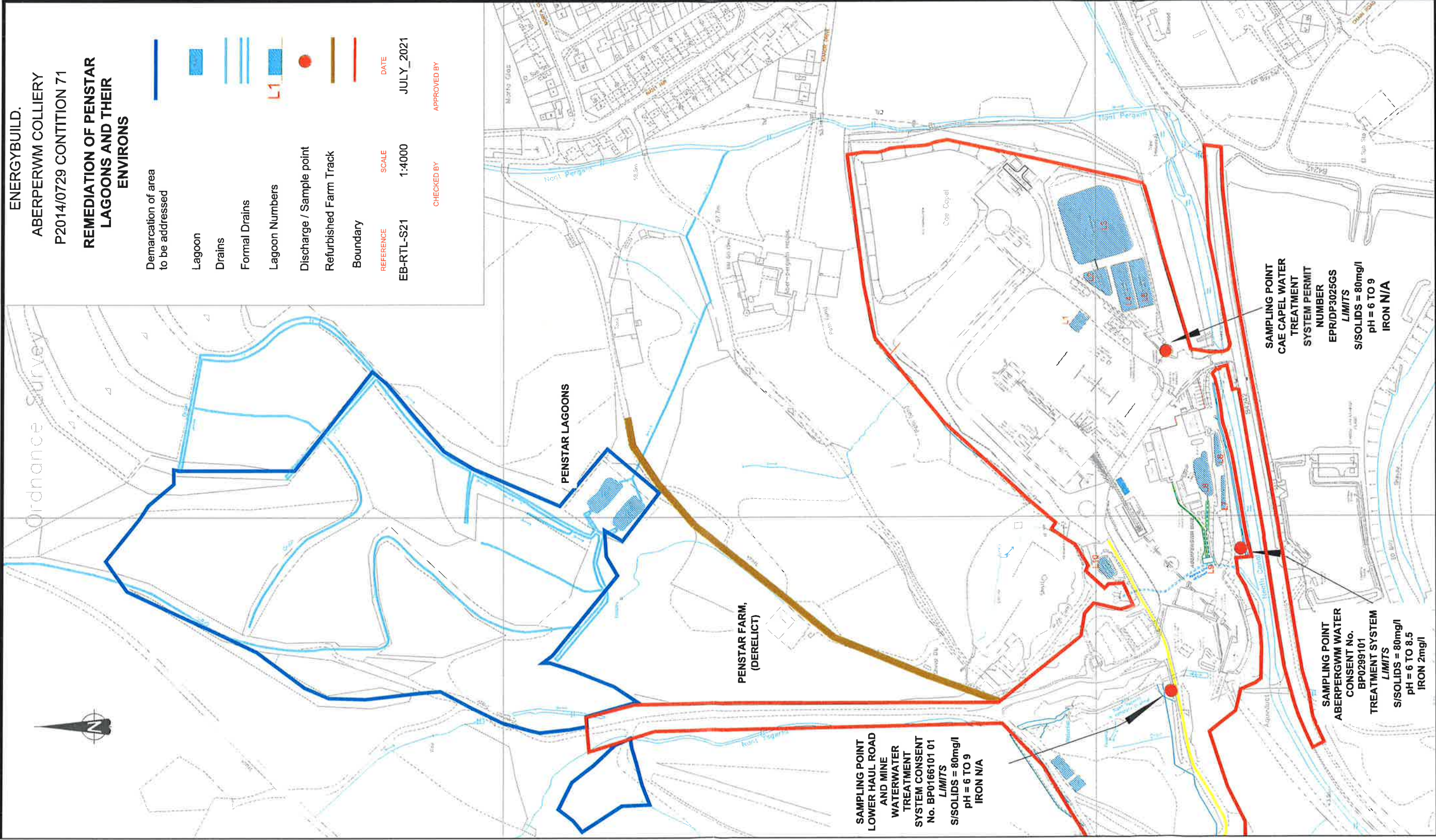
J N Price
Energybuild Ltd.

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PLAN 1 - Plan No. CA10605-002 – LOCATION AND GENERAL ORIENTATION

SCHEME FOR THE REMEDIATION OF THE ROCK TIP LAGOONS AND THEIR ENVIRONS

PLAN 2 –EB-RTL-S21- ROCK LAGOONS AND THEIR ENVIRONS



SCHEME FOR THE REMEDIATION OF THE ROCK TIP LAGOONS AND THEIR ENVIRONS

PLAN 3 – CONDITION ROCK LAGOONS PRIOR TO REMEDIATION.



REFERENCE	
Penatar Farm Access Road	----->
Coal Spoil	-----
Clean Sediment Buildup	-----
Reform Channel	-----
Renew Fence	-----
Rock Tip Lagoons	-----
Area to be Cleared of Vegetation (Winter 2019/2020)	-----
ENERGYBUILD LIMITED ABERPERGWM COLLIERY	
PLANNING CONSENT: P/2014/0729 CONDITION 71: REMEDICATION OF ROCK TIP LAGOONS	
PLAN UPDATE: 01 Dec 2019	
PLAN Drawn by: JJ	
Scale: 1:500	
Plan Ref: EBA/C/ROCK/01/1	

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APPENDIX 1. ECOLOGICAL MANAGEMENT PLAN (EMMP)