

11 February 2019

Attention: Anthony Ko
Senior Environmental Assessment Officer
Resource and Energy Assessments
Department of Planning and Environment
GPO Box 39
Sydney, NSW 2001

Dear Anthony,

RE: Centennial Coal Submission to the Eraring Ash Dam Modification (Mod 1 - 07_0084)

In response to your email on 8 February 2019 regarding Centennial Coal's submission to the NSW Department of Planning (DPE) in response to the Eraring Ash Dam Modification (Mod 1 – 07_0084) Environmental Assessment (EA), please find enclosed the additional information as requested.

It is noted that Centennial Coal does not object to the modification and have provided comments to the DPE for consideration.

The EA was exhibited between 13 September 2018 and 27 September 2018 and a Response to Submissions Report (RTS) for the project was prepared in December 2018. As the Centennial Coal submission was received after the preparation of the RTS, a response is provided within this letter.

Centennial Coal raised three main issues in their submission, being:

- Mine subsidence risks and the potential reduced effectiveness of mitigation measures should Centennial Coal perform future mining beneath the former Awaba mine workings, which are located under the proposed expansion area of the Eraring Ash Dam;
- The composition of the grout to be placed in the underground mine workings, should Origin select to grout them; and
- The potential sterilisation of coal reserves which may occur if Origin were to establish offset areas in Crown land to the north of the existing Eraring Ash Dam.

A response is provided to each of the three main issues below.

Awaba Workings and Mine Subsidence

Centennial Coal are investigating a potential extension of underground mining operations of the Newstan Colliery, which includes an area beneath the proposed Western Emplacement Area. Centennial Coal notes that a potential extension of underground mining may be developed in the future; approximately 200 – 230m below the disused working of the Awaba mine within the West Borehole Seam.

Part 3 of the *Coal Mine Subsidence Compensation Act 2017* requires approval from the Chief Executive for development within a mine subsidence district. The Project is located within the West Lake Mine Subsidence District. Subsidence Advisory NSW was consulted with regard to the current proposed Project (20/04/2018), given the proximity of the Eraring Ash Dam to historical underground workings. An approval under Part 3 of the *Coal Mine Subsidence Compensation Act 2017* would be sought and obtained as appropriate.

A Mine Void Rehabilitation Plan (MVRP) would be prepared in consultation with Subsidence Advisory NSW and Centennial Coal Company Limited prior to mine void treatment activities commencing. The MVRP would identify the proposed void treatment methods, excavations, a material placement strategy and design criteria. This may include consideration of subsidence parameters during

development of design criteria to minimise risks posed by the future development of the West Borehole Seam.

Proposed Grouting of Mine Voids

Mitigation measures proposed for the project include a Mine Void Rehabilitation Plan (MVRP) which would be prepared in consultation with Subsidence Advisory NSW and Centennial Coal Company Limited prior to mine void treatment activities commencing. The MVRP would outline the construction quality control measures to be implemented including monitoring, verification of works and quality control of grouting materials.

It is anticipated that the performance characteristics of the grouting material would be established prior to placement to minimise the potential for long-term degradation of the quality of water within the Awaba mine workings occurs. The Mine Subsidence Impact Assessment prepared in support of the Project identifies previous examples of filling mine voids, that suitable cement stabilised fly ash grouts have been successfully placed below water level at numerous sites and that the technology to design and place grout below water level is well established (SCT, 2018).

Coal Sterilisation and Biodiversity Offsets

The need for access to prospective land for mineral exploration and the potential for sterilisation of mineral resources through incompatible land use is noted.

Potential offset locations located both within and outside of Origin's existing landholdings are identified within the EA.¹ Origin would consult with the NSW Department of Planning and Environment – Division of Resources and Geoscience during development of the Biodiversity Offset Strategy should off-site offset locations be required.

Origin is committed to continuing positive engagement with Centennial Coal and pursuing collaborative efforts to enable the continued operation of Eraring Power Station and Newstan colliery.

Yours Sincerely,



Lauren Barnaby
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¹ Figure 8.1 contained within the Biodiversity Development Assessment Report prepared by Umwelt, July 2018 (ref. 4145/R04/Final) and included as Appendix C of the Environmental Assessment prepared by AECOM dated 15th August 2018.