

 Your reference
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 Our reference
 : SF18/23760; DOC18/197659

 Contact
 : Mr Allan Adams; (02) 6332 7610

Ms Phillipa Duncan Team Leader Department of Planning & Environment GPO Box 39 Sydney NSW 2001

5 April 2018

Dear Ms Duncan

Re: Cadia Hill Open Pit Tailings Modification

I refer to your email correspondence dated 29 March 2018 to provide comments on the Statement of Environmental Effects (SEE), and supporting documents (AGE Groundwater Assessment, HEC Final Void Water Balance and Water Management, and the HydroAlgorithimics expert opinion) for the proposed Cadia Hill Tailings Modification at Cadia Valley Operations (CVO).

The Environment Protection Authority (EPA) has reviewed the SEE and supporting documents and concurs with the conclusions of those assessments that the deposition of tailings within the Cadia Hill open cut pit to 420 m Australian Height Datum (AHD) will have negligible environmental impact. The open pit provides guaranteed containment and has low inherent permeability due to the nature of the host rock.

As the Department of Planning and Environment (DPE), and CVO would be aware, the EPA has advocated the benefits of utilising the Cadia Hill open pit for tailings placement in preference to the current placement in the Northern and Southern Tailings Storage Facilities. The use of the open pit appears to provide a nil to negligible environmental impact in the immediate and long-term, with guaranteed encapsulation and physical containment.

The EPA considers filling the pit void with tailings is preferable to the currently approved end use of the open pit, which is as a lake. The SEE indicates that the tailings are not acid forming, as the "sulphide mineralisation is largely extracted during processing" whereas the exposed geology within the open pit will generate acidic drainage generated from the oxidation of potentially acid forming rock. In the absence of tailings, the approved final pit void lake would be a deep, acidic, water body, whereas filling with tailings to 650 m AHD would substantially reduce and stabilise all subsidence risk and neutralise all the potentially acid forming material.

The EPA has no recommended conditions for the approval. The EPA will however, review the current groundwater monitoring undertaken by CVO to determine if additional monitoring bores need to be included on Environment Protection Licence 5590.

Should you have any further enquiries in relation to this matter please contact Mr Allan Adams at the Central West (Bathurst) Office of the EPA by telephoning (02) 6332 7610.

Yours sincerely

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DR SANDIE JONES MANAGER REGIONAL OPERATIONS Environment Protection Authority

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