



Your reference: DA No 251-09-01
Our reference: EF13/2845; DOC15/351059-01
Contact: Jason Price 02 6969 0700

The Planning Officer
Resource Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Hawkeswood

Re Proposed modification - Ginkgo Mineral Sands Project DA 251-09-01

Thank you for your electronic mail dated 4 September 2015 to the Environment Protection Authority (EPA) seeking comments on the Environmental Assessment (EA) that supports the development application for a proposed modification to waste management at the Ginkgo mineral sands mine near Pooncarie.

We have reviewed the information provided and determined that we can support the proposed modification subject to the Department of Planning and Environment (DPE) incorporating the recommended conditions provided in the enclosed Attachment 'A' into the modified development consent. We expect that all other existing conditions in Schedule 3 of the consent will be retained.

Attachment 'B' contains our assessment of the EIS, including justification for our recommended conditions of consent.

Please note that inclusion of our recommended conditions in any development consent granted by the DPE is important for our ongoing support of the proposal. It is expected that the EPA will be given an opportunity to review and comment on the DPE's draft conditions of consent for this proposal.

Where modified development consent for the Ginkgo mineral sands mine is granted, an application for a variation of Environment Protection Licence No 12264 will be required to be submitted by the applicant to the EPA, prior to any construction work or activities associated with the proposal.

If you have any further enquiries about this matter please contact Jason Price by telephoning 02 6969 0700.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Darren Wallett', followed by the date '11/9/15' written in a similar style.

DARREN WALLETT
Head, Griffith Unit
Environment Protection Authority

ATTACHMENT 'A'

The Environment Protection Authority (EPA) recommends that the following conditions are included in any modified approval granted for the Ginkgo mineral sands mine.

SCHEDULE 3

Specific Environmental Conditions

Waste Management

24. The Applicant shall:

- a) construct, manage and rehabilitate the on-site solid waste landfill strictly in accordance with the document prepared by Cristal Mining Australia Limited titled "Ginkgo Mineral Sands Mine, Waste Management Modification, Environmental Assessment" dated August 2015;
- b) ensure the handling, storage and disposal of all solid waste streams generated on site, is consistent with the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline*;
- c) minimise and monitor the waste generated by the development;
- d) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
- e) report on waste management and minimisation in the Annual Review,

to the satisfaction of the Secretary.

Note: The waste minimisation measures are not relevant to back loaded MSP process waste, overburden or sand residues.

25. [Deleted]

26. [Deleted]

ATTACHMENT 'B'

Proposal

The Ginkgo mineral sands mine is operated by Cristal Mining Australia Limited (Cristal) and located 85 kilometres north-east of Wentworth. The mine was approved in 2002 under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) through Development Consent DA 251-09-01.

General solid waste generated at the mine is currently transported off-site and disposed nearby at the Pooncarie public landfill. Cristal have lodged a modification application under 75W of the EP&A Act to construct and manage a small general solid waste landfill within the initial sand residue dam footprint. The landfill will have maximum dimensions of 100 metres in length, 6 metres wide and a depth of 4 metres. The landfill modification is supported by an Environmental Assessment (EA) dated August 2015 and prepared by Cristal.

Air Quality

The potential concern for this development in terms of air quality is impacts from dust and associated airborne particulates generated from construction works, capping activities and heavy vehicle movements.

The information presented in the EA to assess the potential impacts from the project is not consistent with the EPA's guideline the 'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW' (EPA 2005). However we note the nearest sensitive receptor is located approximately 8 kilometres from the mining lease and based on the information detailed in the EA it is reasonably expected that landfilling activities will have a negligible air quality impacts outside the mining lease.

The EPA does not propose any change to the existing air quality monitoring requirements at the mine and has recommended a condition that the proposed landfill is constructed and managed strictly in accordance with the EA.

Noise

The EA has not included a Noise Impact Assessment in the EA presented for the project which is inconsistent with our Industrial Noise Policy (INP - EPA 2000) for this type of development. However we note the nearest sensitive receptor is located approximately 8 kilometres from the mining lease and based on the information detailed in the EA it is reasonably expected that landfilling activities will have a negligible noise impacts outside the mining lease.

The EPA does not propose any change to the existing noise monitoring requirements at the mine and has recommended a condition that the proposed landfill is constructed and managed strictly in accordance with the EA.

Ground and Surface Water

Groundwater at the mine is monitored through a network of bores and the upper Loxton-Parilla sands aquifer is known to be saline with limited access by regional landholders. Based on previous groundwater assessments for the mine (GOE-ENG, 2014) the proposed landfill is highly unlikely to intersect groundwater. The EPA notes that a contemporary leachate barrier and collection system will be installed to protect groundwater.

The Ginkgo mine is located in a semi-arid climate with no well-defined natural drainage pathways. The EA details the landfill will be managed consistent with the mine's existing Erosion and Sediment Control Plan and ephemeral surface water will be diverted around the landfill to minimise leachate generation.

Our assessment is that there is a very low risk to groundwater and surface waters from the development. The EPA does not propose any change to the existing ground and surface water monitoring requirements at the mine and has recommended a condition that the proposed landfill is constructed and managed strictly in accordance with the EA.

Waste

The proposed wastes to be landfilled include general solid (putrescible) and general solid (non-putrescible) with a maximum of 350 tonnes per annum expected to be disposed to the landfill for the remaining life of the mine. Prior to disposal the waste will be subject to waste minimisation principles already employed at the mine, as required by the development consent, where compostable and recyclable wastes are removed from the waste stream.

The general arrangement and operational management of the waste as described in Sections 4.3, 4.4 and 4.5 of the EA indicate that the waste will be managed and disposed consistent with the EPA's draft guideline the *Environmental Guidelines: Solid Waste Landfills (2015)*.

The EPA has recommended two (2) additional conditions are included in any modified development consent to ensure the landfill is constructed and managed consistent with the EA and relevant government waste guidelines. This will also ensure there are no adverse impacts to sensitive receptors and the potential receiving environment. We recommend that 2 existing conditions related to the Pooncarie landfill are removed from the consent.