



Contact Vanessa Hornsby
Phone (02) 8838 7816
Email vanessa.hornsby@dpi.nsw.gov.au
Our ref ER22086

Colin Phillips
Senior Planner, Mining Projects
NSW Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001
Via email: colin.phillips@planning.nsw.gov.au

Dear Colin

Subject: Environmental Impact Statement (EIS) for the Airly Mine Extension Project – Centennial Coal [SSD 5581] [Our Ref: ER22086]

The NSW Office of Water has reviewed the EIS for the proposed Airly Mine Extension Project (SSD 5581) and provides the following advice for consideration, with further detail provided in Attachment A.

It is recommended that the proponent:

- Assess the potential impacts of reductions in baseflow due to mining on basic landholder rights for surface water users.
- Undertake a further review of the groundwater dependant ecosystems within and around the project application area, with reference to the potential for impacts relating to base flow and surface seepage (springs) reductions.
- Clarify the expected volumetric take of water from mine inflows after cessation of mining activities.
- Clarify water licensing arrangements for surface water and incidental ingress of groundwater into the mine and obtain additional water entitlement if required.
- Clarify the proposed life of the mine. Proposed coal production is due to commence in 2015, and is to extend for 25 years (estimated to cease in 2040) with a recovery of 60 years to 2100. The modelling and subsequent groundwater assessment report detail the production of coal is to last until 2030.
- Refer to the NSW Office of Water guideline *“Groundwater Modelling and Monitoring Plans – Introduction for prospective mining and petroleum exploration activities”*, and liaise with the Office of Water when preparing the Groundwater Monitoring and Modelling Plan (GWMMP) for the project.
- Include periodic monitoring of geomorphic conditions of third order streams within the project area as part of a post-approval management plan.
- Ensure that any take of clean water runoff is licensed through the Office of Water.
- Investigate and determine the frequency and intensity of rainfall event that may cause larger onsite dams to go into discharge.

Should you require further information regarding the Office of Water's advice, please contact Vanessa Hornsby, Water Regulation Officer, on (02) 8838 7816.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'M. Isaacs', with a stylized, cursive script.

Mitchell Isaacs

Manager Strategic Stakeholder Liaison

7 November 2014

NSW Office of Water comments: Airly Mine Extension Project (SSD 5581) EIS

Surface water

- While the proponent has predicted negligible impacts on the geomorphology of third order streams within the project area, periodic monitoring of geomorphic conditions should be undertaken as part of a post-approval management plan to ensure any greater than predicted impacts are quickly identified and mitigated.
- Further information is required as to the likelihood and frequency of discharge events from the large onsite dams, and management options to reduce potential for wet weather discharge.
- While an assessment of impacts on basic landholder rights for groundwater users has been included as requested, a similar assessment for surface water users has not been presented. An assessment of potential impacts that predicted reductions in baseflows may have on basic landholder rights of surface water users should be undertaken by the proponent. This should include information regarding proposed measures to minimise or mitigate potential impacts as necessary.
- Further clarification of surface water licensing arrangements is required, including that for any clean water runoff taken.

Groundwater

Overview

- Given the predicted groundwater drawdown estimates in the alluvial sources, there is potential for groundwater dependant ecosystems to be impacted.
- No details can be found of the expected volumetric take of water from mine inflows after the cessation of mining in 2030. A peak of 184 ML is predicted during the last year of mining in 2030, but no further details can be located in the reports provided.
- As stated in the independent peer review of the groundwater model, the life of the proposed mine is 25 years; with a commencement date of 2015 (subject to planning approval). This would make 2040 as the final year of mining. With coal production due to be completed by 2030, as detailed throughout the proponent's EIS and Groundwater Impact Assessment, the duration of the project and the modelling data appear to be erroneous. It is unclear if there is to be 15 years of mining to 2030, or if the modelling has not accounted for the 2030 to 2040 period.

Recommendations

It is recommended the proponent be requested to address the following:

1. Undertake a further review of the groundwater dependant ecosystems within and around the project application area, with reference to the potential for impacts relating to baseflow and surface seepage (springs) reductions.
 - o Specific advice should be sought from OEH about the values and importance of the various ecosystems which may be affected by the baseflow losses (including spring discharges, such as Village Spring and others named in the investigation). On this basis the proponent should provide details about whether the potential biodiversity impacts would be of concern if realised.

2. Clarify the expected volumetric take of water from mine inflows after cessation of mining activities. Peak mine inflow of 184 ML is predicted for final year (2030) but the ongoing take post closure is not clear.
3. Clarify the proposed mine timeframe. Proposed coal production is due to commence in 2015, and is to extend for 25 years (estimated to cease in 2040) with a recovery of 60 years to 2100. The modelling and subsequent groundwater assessment report detail the production of coal is to last until 2030.
4. In preparing a Groundwater Monitoring and Modelling Plan, the applicant cite the “Groundwater Monitoring and Modelling Plans – Introduction for prospective mining and petroleum exploration activities” document as found on the NOW website: <http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/Aquifer-interference>.
5. Liaison and/or correspondence with NOW when developing the GMMP is sought for adequacy of the monitoring system.

End Attachment A