



Department of Primary Industries

OUT15/22793

Mr Kane Winwood
Mining Projects
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

27 AUG 2015

Kate.Winwood@planning.nsw.gov.au

Dear Mr Winwood,

Mount Owen Continued Operations Project (SSD 13_5850) Comment on the Response to Submissions Report

I refer to your email dated 6 August 2015 to the Department of Primary Industries in respect to the above matter.

Comment by DPI Water

The Office of Water has reviewed Response to Submissions Report (RTS) for the Mount Owen Continued Operations Project (MOCO) and provides the following comments and recommended conditions of approval in **Attachment A**.

Groundwater licences

Predicted peak take from alluvial aquifers is 6 ML from Betty's Creek alluvium (Jerry's Water Source) and 15 ML from Main Creek alluvium (Hunter Regulated River Alluvial Water Source within the Hunter Unregulated and Alluvial Water Sharing Plan (WSP)).

Mount Owen states that the project is not predicted to have any impact on alluvial aquifers in the Bettys Creek alluvium and Main Creek Alluvium until 2021 and 2023 respectively, and that requiring Mount Owen to hold these licences prior to any impacts occurring would effectively sterilise 21 ML of water in this system in the intervening period, creating a greater impact on available water resources in these alluvial aquifers.

DPI Water requires a written strategy prior to commencement outlining the timing and mechanisms for how this entitlement will be acquired before any take of water from the alluvial aquifers occurs. This should include a comprehensive analysis of the proposed water supply arrangements against the rules for access licences and requirements of the Hunter Unregulated WSP, including analysis of the market depth within the relevant water sources that displays the ability to acquire the

necessary entitlements and also the ability to carry out a “dealing” to transfer the water under the rules of the WSP.

Water balance and imports

DPI Water is satisfied with the further information provided outlining sufficient supply of water to meet the peak water deficit of 810 ML.

Surface water management and clean water diversions

Additional figures have been provided in the RTS showing areas of clean water capture that will be accounted for under harvestable rights provisions. DPI Water requires further clarification on whether the surface water management system proposed has changed from that proposed in the Environmental Impact Statement (EIS) – Surface Water Assessment, as the figures provided in the RTS do not show all flow paths for the diversion system and there appear to be some changes to flow paths.

The following comments are in reference to Figures 4.1 – 4.5 in Appendix 9, Surface Water Assessment, of the EIS and Figures 4.6 – 4.8 in the RTS in relation to the clean water management system. DPI Water requires further consultation in development of the Surface Water Management Plan prior to commencement in regards to these comments:

- In Year 1 of the project, there are clean water diversions north-west of Ravensworth East into Dam X (as shown in Figure 4.2 of the EIS), which is a dirty water dam. Further explanation of this clean water capture in dirty water dams is required.
- In Year 1 of the project there are clean water diversions into dam AG (as shown in Figure 4.2 of the EIS), which is a dirty water dam. Further explanation of this clean water capture in dirty water dams is required.
- In Years 1, 5 and 10 there appears to be a larger area of clean water runoff south of the southern remnant offset that flows into Dam AC and the Freshwater Dam and subsequently into the Rail Loop Dam (mine water dam) (as shown in Figures 4.2, 4.3 and 4.4 of the EIS). This area of clean water capture does not appear to be shown in Figures 4.6, 4.7 and 4.8 of the RTS.
- In Years 5 and 10 there are clean water diversions from Ravensworth East into Dam X (as shown in Figures 4.3 and 4.4 of the EIS), which is a dirty water dam. Further explanation of this clean water capture in dirty water dams is required.
- In years 5 and 10 there appears to be additional area of clean water capture north of Dam BB that flows into ECD1. This area of clean water capture does not appear to be shown in Figures 4.7 and 4.8 of the RTS.
- In Year 10 there appears to be clean water captured in Dam AD (subsequently going into ECD1) that is not shown in the area of clean water capture in Figure 4.8.
- In year 10 there are clean water diversions into SD5 (as shown in Figure 4.4 of the EIS), which is a dirty water dam. Further explanation of this clean water capture in dirty water dams is required.

Final landform

DPI Water requested further information on the proposed licensing status of clean water dams in the final landform. Mount Owen responded in the RTS that the licensing requirements associated with final landform will be dependent on the ownership of the land and the licensing arrangements in force at the time of closure,

and that licensing will be considered through the development of the detailed Closure Plan, five years prior to mine closure in consultation with DRE and DPI Water. This response is not sufficient to respond to the concerns regarding the final landform and the proponent must design the final surface water management system with regard to the current legislation and licensing requirements.

The final landform proposed (Figure 4.5 of Surface Water Assessment, EIS) shows over 50 clean water dams of varying size. Even if all of the current Mount Owen landholdings of 4,913 hectares is maintained in ownership of the proponent, the proposed dams shown in the final landform would far exceed the harvestable right of the property of 344ML (just the Rail Loop Dam – 100ML, ECD2 – 310ML, and CHPP Raw Water Dam – 96ML equates to 506ML in total volume alone). This would result in a significant volume of water held in dams that would require licensing within the Jerry's Water Source, which would exceed the licensed entitlement currently held by Mount Owen.

DPI Water requires further information on this licensing issue, including detailed information on the volume of water held in dams in the proposed final landform, information regarding how Mount Owen proposes to account for this water, or a modified final landform, prior to commencement. Mount Owen should liaise with DPI Water in the development of the Water Management Plan to address these issues.

Consultation with DPI Water is requested on the development of the proposed final landform in regards to the reconstruction and rehabilitation of watercourses. It is expected an extensive understanding of geomorphological and hydrological processes will be required to ensure long term stability and rehabilitation is achieved. Mount Owen must ensure consistency with relevant guidelines, such as *DPI Water Guidelines for Controlled Activities on Waterfront Land*, policies and legislative requirements.

For further information contact Brendan Mee, Water Regulation Officer, (Newcastle Office) on (02) 4904 2524 or at brendan.mee@dpi.nsw.gov.au.

Yours sincerely



Kristian Holz
Director Policy, Legislation and Innovation

Attachment A

Mount Owen Continued Operations Project (SSD 13_5850) Comment on the Response to Submissions Report Recommended Conditions of Approval – DPI Water

- The Proponent shall review the Water Management Plan for the project. This Plan must be developed in consultation with DPI Water and include:
 - details of water use, metering and water management on site,
 - details of water licence requirements,
 - Surface Water Management Plan, and
 - Groundwater Management Plan.
- The Surface Water Management Plan must include:
 - a program to monitor:
 - surface water flows and quality,
 - surface water storage and use, and
 - sediment basin operation,
 - sediment and erosion control plans,
 - surface water impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts, and
 - a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.
- The Groundwater Management Plan must include:
 - baseline data on groundwater levels and quality,
 - a program to monitor groundwater levels and quality,
 - groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts,
 - a protocol for the investigation and mitigation of identified exceedances of the groundwater impact assessment criteria.
 - a protocol for periodic review of groundwater model calibration and verification of groundwater take predictions and groundwater impacts.

End Attachment A