



Our ref: DOC20/77598

Senders ref: MP06_0168-Mod-7

Andrew Rode
Department of Planning, Industry and
Environment
GPO Box 39
SYDNEY NSW 2001

Via email:

andrew.rod@planning.nsw.gov.au

13 February 2020

Dear Mr Rode

Subject: Snapper Mine Mod 7 (MP06_0168-Mod-7)) - Response to submissions

Thank you for your email dated 31 January 2020 about the Response to Submissions (RTS) for the Snapper Mine Mod 7 (MP06_0168-Mod-7), seeking input from the Biodiversity and Conservation Division (BCD) of the Department of Planning, Industry and Environment (the Department).

We have reviewed the RTS against BCD's comments on the Environmental Impact Statement (EIS) provided to Planning and Assessment on 18 December 2019.

Aboriginal cultural heritage

The issues relating to Aboriginal cultural heritage have been resolved. BCD requested that survey transects be presented as per the Code of Practice for Archaeological Assessments in NSW (OEH 2010). We are satisfied with the response provided in the RTS, together with the revised ACHAR.

Hydrogeology

BCD considers that further work is required on the RTS for the proponent to address our comments on hydrogeology. Three further actions are recommended in **Attachment A** to address these remaining issues.

All plans required as a Condition of Approval that relate to biodiversity, Aboriginal cultural heritage and hydrogeology should be developed in consultation with and to the satisfaction of BCD to ensure that issues identified in our EIS response and this submission are adequately addressed.

If you have any questions about this advice, please contact me via rog.southwest@environment.nsw.gov.au or 02 6022 0623.

Yours sincerely

Andrew Fisher
Senior Team Leader Planning
South West Branch
Biodiversity and Conservation Division
Department of Planning, Industry and Environment

ATTACHMENT A – Detailed comments – Snapper Mine Mod 7 (MP06_0168-Mod-7) - Response to submissions

ATTACHMENT A BCD comments on Snapper Mine North Mod 7 (MP06_0168-Mod-7) - Response to Submissions

Detailed feedback about the Applicant's response to the BCD EIS submission is provided in the table below. Issues that are not listed below are considered by BCD to be resolved.

Hydrogeology

BCD Issue 1	Groundwater level monitoring could be improved by the installation of water pressure loggers measuring at daily or sub-daily intervals.
	We consider the groundwater monitoring frequency of monthly and quarterly groundwater level measurements should be increased to daily (or sub-daily). It is relatively inexpensive to install instrumentation to allow monitoring at daily levels, that can still be downloaded on a monthly or quarterly basis. Also see Issue 3 below.
Recommend	Increase the frequency of groundwater monitoring to daily

BCD Issue 2	The 2019 Hydrogeology Report provided no discussion of the Snapper Mine reverse osmosis plant or its management, which we consider to be an omission. In particular, no details are provided on brine treatment, volumes, storage or disposal and its potential effects on the environment (to surface water, groundwater or soils).
	We consider there is insufficient data presented on brine production (e.g. tonnes/annum) or disposal (brine produced by the reverse osmosis plant is approved to be disposed in the mine path with process wastes) and its effect on the environment. The proposed modification is likely to increase brine production and need for disposal, but insufficient data has been presented to enable meaningful assessment of this.
Recommend	A Brine Management Report detailing volumes, disposal and monitoring protocols be required as a condition of consent

BCD Issue 3	Monitoring bore GW036669 is located between the Snapper and Ginkgo mines (see Figure 3 in EIS Hydrogeology Report). Ginkgo Mine commenced in late 2005, Snapper Mine commenced towards the end of 2009. The Department's examination of WaterNSW monitoring data indicates that GW036669, which had been stable since 1990 (AHD=-34-36m), now shows a decline (~1m post 2010). Importantly there are greater fluctuations in two of the bore holes (holes 2 & 3) post-2010, whereas levels in bore hole 1 remained relatively constant.
	The variability in bore GW036669 holes 2 & 3 post 2010 may potentially be indicative of an impact of the Snapper mine on levels in those bore holes The Department should have access to raw monitoring data to enable an independent assessment of the groundwater and surface water impacts, if required
Recommend	Raw monitoring data to be supplied to the Department on request be a condition of consent