



OUT19/16062

Andrew Rode
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NSW Department of Planning and Environment

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Dear Mr Rode

**Snapper Mine Northern Extension - MOD 7 (MP06_0168-Mod-7)
Modification Report**

I refer to your email of 27 November 2019 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following advice for you to consider is from DPIE Water and NRAR. Please note the Department of Primary Industries (DPI) and Crown Lands now provide a separate response.

Further information can be found in **Attachment A**.

Pre-Approval

1. The proponent should provide an estimation of the extension in drawdown in the upper aquifer associated with mine path extension, particularly at the nearest private bore (Greenvale Well) and how this complies with the AIP guidelines.

Post Approval

2. The schedule for monitoring (Appendix F, Section 2.7, Table 1) should include bore SM1.
3. The proponent should provide a calculation of evaporation loss as a result of the Project.
4. The proponent should provide a calculation of the increase in infiltration volume due to infiltration in the final depression associated with the dredge pond at cessation of mining.

Any further referrals to DPIE – NRAR & Water can be sent by email to:

landuse.enquiries@dpi.nsw.gov.au.

Any further referrals to DPI & Crown Lands can be sent by email to: dpi.cabinet@dpi.nsw.gov.au & lands.ministerials@industry.nsw.gov.au respectively.

Yours sincerely

Simon Francis
Senior Policy Officer, Assessments
Water - Strategic Relations
21 February 2020

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Modification Report**

1. Appendix F Section 6.1.2 states that the Modification would result in a minor northern extension in drawdown in the upper aquifer associated with the mine path extension during mining. The proponent should provide an estimation of the extension in drawdown in the upper aquifer associated with the mine path extension, particularly at the nearest private bore (Greenvale Well) and how this complies with the AIP guidelines.
2. Appendix F Section 2.7 Table 1 includes Tronox-owned monitoring bores and their schedules however does not include SM1. SM1 is located north of the mine path and is predicted to have a decline in the water level of the upper aquifer. SM1 should be included in Table 1.
3. Modification 7 involves an extension of the mine path by approximately 600 m at the northern end. Appendix F Section 5.2 details that the extension would result in a minor extension (to the north) of groundwater interactions associated with the dredge pond, namely lowering of the water table level due to dredge pond level maintenance, and creation of a groundwater mound behind the advancing dredge pond. This section lacks detail on any potential increase in groundwater take due to lowering of water table and evaporative losses due to the 600m extension of mine path.
4. Appendix F Section 5.3 states that the rate of infiltration in the final depression associated with the dredge pond at cessation of mining will be higher than normal due to its increased surface area (40 ha prior to Modification 7, 200 ha after Modification 7), but does not provide a modelled estimate of the increased infiltration volume or provide an assessment that the increase will not impact adjacent water quality (beyond 40 m from the activity). It is therefore required that the Modification 7 Report (Appendix F) include calculation of the increase in infiltration volume and an assessment that this increase will not result in groundwater quality change 40 m from the activity.