Our reference: DOC19/290391

NSW Department of Planning, Industry and Environment
Via email: andrew.rode@planning.nsw.gov.au

Dear Andrew

Snapper Mine Northern Extension – Major Project (Mod - 7),
Wentworth Shire Council, NSW

I refer to the email (sent Thursday 5th December 2019) and request to the Far West Area of the NSW Department of Industry, Planning and Environment– Crown Lands (the department), in relation to the above project.

The department has now had the opportunity to review the Modification Report and has provided the following comments below:

Crown land tenures
The department notes that access to the mine will be via Nob Road and Roo Roo Road, via the Silver City Highway approximately 40km to the west.

The department has identified a number of Western Lands Leases (WLL) attached to the Modification area. These properties have been identified as:

- Perpetual WLL 4090 (Lot 1926 DP763904) for the purpose of "grazing", tenanted by Mark Alexander Withers;
- Perpetual WLL 4086 (Lot 1927 DP763905) for the purpose of "grazing", tenanted by Gary Colin Cullinan and Stacey Lee Cullinan.
- Perpetual WLL 4085 (Lot 1925 DP763903) for the purpose of "grazing and conservation", tenanted by Bemax Resources Limited.
- Perpetual WLL 4087 (Lot 1929 DP763907) for the purpose of "grazing and conservation", tenanted by Bemax Resources Limited.

The department notes the location of WLL 4090 and WLL 4086 being located adjacent to Nob and Roo Roo Roads and at the entrance to the mine. The proponent will need to determine the type of legal access available to the MLA across these properties. The department and property owners are required to be consulted with.

Crown land licences
A Crown land licence (issued under the *Crown Lands Management Act 2016*) may be required by the department to authorise activities and associated infrastructure over the affected land tenures (WLLs 4090 and 4086). A licence may be required for any or all of the following:

1) Water supply pipeline corridor from the nominated bore to the MLA and other infrastructure, but only where the pipeline traverses outside of the MLA; and
2) Any other infrastructure no located within the MLA that may fall outside of its boundary.

Easements and Acquisitions
There is an existing ETL connection between Snapper Mine and Gingko Mine, to the northeast, which connects further to the southeast (Figure 11, Page 51). It is considered these ETL easements were acquired and registered as an easement during the Project Approval process. Electricity transmission line (ETL) for the Mining Lease Application (MLA) is not proposed to change in light of the Modification.

TransGrid are the assets owner and responsible for the maintenance of the transmission line. Should any part of the ETL need to be moved/constructed outside of the MLA on Crown land, an easement will likely be required.

The realignment of the new Nob Road will be undertaken and will be constructed as an unsealed road to meet relevant design requirements of the Wentworth Shire Council (WSC) and/or Austroads. This will require acquisition of the new road casement.

Easements can take up to 12 months to complete the required survey and registration. If early acquisition and use of the proposed occupied lands is required; the proponent may apply for a Crown lands licence over the affected area(s). Once the easement is registered, the licence would then be terminated.

It is a departmental requirement that any and all easements (or respective licence), that have not already been approved by the department, must be obtained prior to any activity occurring. This includes any proposed construction of easements to support this modification.

Crown land review

The department has made its review and notes that many of the environmental criteria and issues considered in relation to proposed activities on Crown land have been satisfactorily addressed in the Modification Report (prepared by Tronox, November 2019). Items for consideration are further detailed.

Mining operations

The department notes in Section 2.3.1 (Page 6) that the Modification will include an extension of the existing and approved mine path by approximately 600m at the northern end and approximately 500m wide. The extension will result in an approximate 87.4ha increase in the mine surface development, however, the Modification will include the relinquishment of approximately 90.7ha; therefore there will be approximately a 3ha reduction in surface development area in relation to the existing Mining Lease (ML) and overall reduced impact on Crown land.

In Section 2.1 (Page 6), the department notes and supports that the Modification will not change the existing mine components for:

- Life of the mine;
- Mining rate or method;
- Mineral concentrate processing and transport;
- Process waste management;
- Water management, supply and demands;
- Electricity supply;
- Supporting infrastructure;
- Operational hours;
- Rehabilitation strategy; or
- Workforce.

The department notes in Section 2.2 (Page 6) that the Modification is likely to additionally require:

- Temporary overburden emplacements;
- Expanded soil stockpile areas; and
- Extension of other supporting infrastructure. These may include internal access roads, internal electricity transmission lines and other minor infrastructure.

Post Mining Land use and Site rehabilitation

The department notes that progressive rehabilitation will occur over the life of mine operations to help minimise the disturbance footprint. Post-mining land use and proposed rehabilitation works must be undertaken in consultation with all relevant stakeholders, including the leaseholders over WLL 4090 and WLL 4086.

Section 2.5 (Page 11), the department notes that the Snapper Mine's Mining Operations Plan addresses Rehabilitation Management Plan requirements. The long-term decommissioning objectives of the mine, once all modification works are complete, will include:

- Restoring the environment to a self-generating native landscape capable of supporting light intensity grazing;

- Developing non-polluting and stable rehabilitation landforms;
- Removal (preferably) of all remaining infrastructure; and
- Final relinquishment of the mining lease and release from any further liabilities.

Construction materials
The Modification Report does not go into detail about the type, amount and source of materials required for the modification works of the mine site infrastructure. Essentially as the proposal is a modification to the existing operating mine, the department considers that similar construction principles and equipment to be used will not vary greatly from the initial development of the mine- thus may likely be covered under its existing approval (Project Approval [06_0168]).

However, it should be noted that any proposed works to be undertaken on Crown land outside of the MLA will likely require to be approved under a Crown land licence.

Water management
The department notes that, according to Section 2.4 (Page 10) of the Modification Report, the site water will be managed under the Water Management Plan (GHD, 2016). The department notes that the water management system will continue to be adopted to support the ongoing modifications of the Snapper Mine.

Air quality
The air quality assessments undertaken for the Modification were determined to result in a positive reduction in total dust emissions and no change to the approved potential cumulative air quality impacts. The Air Quality Management Plan (GHD, 2015) will continue to be implemented for the Modification.

Dust
Should dust suppression be needed throughout the site extension preparation, construction and operational phase, the proponent will need to ensure that the water used will not lead to dryland salinization. This includes where the bore water is used for dust suppression of access tracks, mine site, hardstand areas and vegetated areas etc.

Groundwater
The department notes that, according to Section 6.9.2 (Page 49 – 52) of the Modification Report, there are currently three existing water supply bores in the MLA and five existing groundwater monitoring bores, which are used to monitor the ground water quality. The water supply bores in the Snapper Deposit lay in a shallow, saline aquifer. Monitoring to date had indicated that the salinity levels have been stable since the commencement of the Snapper Mine operations. Additionally, the department notes that during the 2018 Annual Review reporting period, no groundwater related incidents occurred and no complaints were received by Tronox.

The Modification is not expected to have any measurable effect on the local leaseholder bores – Chalky Well, Greenvale Well and Court Nareen Well.

The department suggests that continued assessment and monitoring of the electrical conductivity of the groundwater is needed to provide information and data on potential salinity threats, especially where water may be used for dust suppression and other surface activities.

Surface water
The department notes in Section 6.10 (Page 53) that there is no well-defined drainage channels located within the Modification Area. Given the distance from permanent water sources, should water accumulate after heavy rainfall events, it is likely to accumulate in topographic depressions and evaporate before seeping into the groundwater table.

The department notes the potential that some surface water runoff may potentially contain sediments, dissolved solids, oils, grease, metals and salts. Erosions and sediment controls, in the form of overburden and soil stockpiles can be used to contain potential spills. Section 6.8 notes that the Water Management Plan (GHD, 2016) prepared in accordance with Condition 2, Schedule 3 of Project Approval (06_0168) will be followed to control potential surface water issues.

Overburden stockpiles

As per Table 1 (Page 9), additional temporary off-path overburden emplacements will be designated as part of the Modification. Consideration should be given to the weight and method of stockpiling (overburden or waste rock) and whether this will cause harmful environmental impacts to the subsoils. Additionally, potential contamination of surrounding land by runoff of soils and water from the stockpiles will need to be investigated, if this has not already happened.

Topsoil stockpiles

All topsoil stockpiles should be appropriately placed and maintained to ensure long-term use of the soil is achieved. If stockpiles are flagged to be revegetated, efforts should be made to have them sown with locally endemic native plant species and should not be stored in an area that may be exposed to potentially contaminated soils/materials.

Native vegetation offsets

Table ES-2 (Page ES-5) notes that there will be no increased impacts on biodiversity values from the Modification and there will be no change or increased impact on biodiversity values on Crown land, as defined *Biodiversity Conservation Act 2016* (Biodiversity monitoring Services, November 2019). The department notes (Section 6.2.1, Page 33) that Tronox already has two offset areas in place for the Snapper Mine totalling approximately 5,471ha.

If you have any further queries in regards to this matter, please do not hesitate to contact myself on 02 6883 3356 or via email pip.sokol@crownland.nsw.gov.au.

Yours sincerely

Philippa Sokol
Senior Natural Resource Management Officer
Crown Lands - Far West Area

17 December 2019