



Snapper Mineral Sands Mine Modification 7

Extension of Mine Path
State Significant Development Modification Assessment
(06_0168 MOD 7)

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1 Introduction

1.1 Background

Tronox Mining Australia Ltd (Tronox) owns and operates the Snapper Mineral Sands Mine, located approximately 85 kilometres (km) north-east of Wentworth and 170 km south-east of Broken Hill, in the Wentworth Shire local government area (see **Figure 1**). The project integrates with other Tronox mining and processing operations in the region including the Ginkgo Mineral Sands Mine (located approximately 10 km northeast of the project), the Atlas-Campaspe Mine (approved but not yet constructed) and the Broken Hill Mineral Separation Plant (MSP).

Approval of the project was granted by the then Minister for Planning on 28 August 2007 under the former Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The approval has been modified on six previous occasions (see **Table 1**) and allows Tronox to:

- extract up to 14 million tonnes per annum (tpa) of mineral sands ore and produce up to 621,000 tpa of mineral concentrate;
- transport mineral concentrate by truck to the Broken Hill MSP for processing;
- receive process waste from the Broken Hill MSP for disposal onsite; and
- operate a range of site infrastructure, including a heavy mineral concentrate treatment facility and reverse osmosis plant.

The project commenced operations in late 2010 and is expected to exhaust the approved resource by mid-2020.

Table 1 | Summary of Previous Modifications

Mod No.	Summary of Modification	Approval Authority	Approval Date
MOD 1	Change to offset area	Department	19 June 2009
MOD 2	Allow road transport of ore to the Ginkgo Mine	Department	11 December 2009
MOD 3	Extraction and production rate increase Final landform changes	Department	18 October 2010
MOD 4	Receive MSP process waste from Atlas-Campaspe Mine	Department	20 October 2014
MOD 5	Extraction rate increase and mining sequence options	Planning Assessment Commission	20 March 2015
MOD 6	Extraction and haulage rate increase	Department	5 December 2014

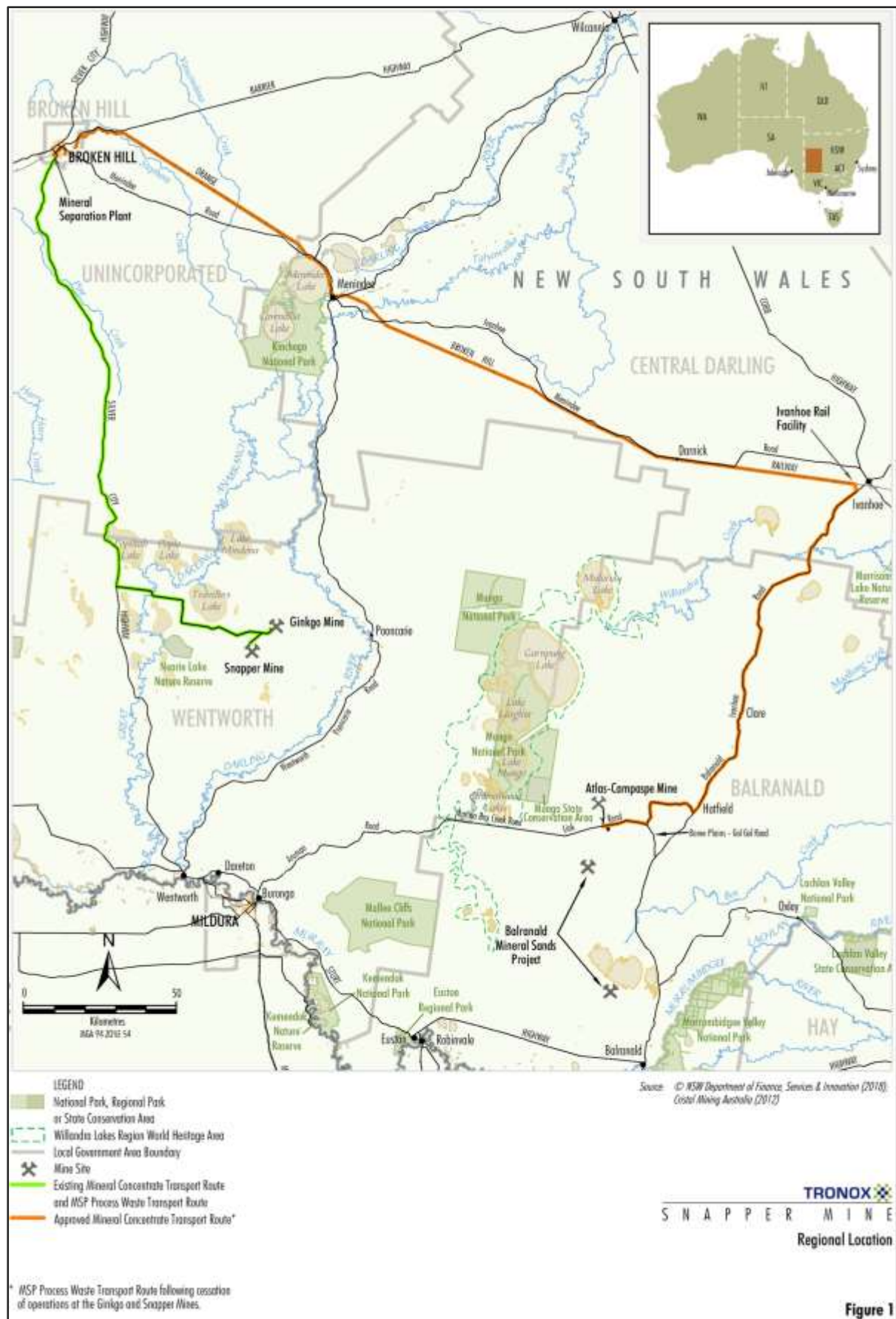


Figure 1 | Regional Context Map

2 Proposed modification

2.1 Scope of modification

On 22 November 2019, Tronox lodged a modification request under section 4.55(2) of the EP&A Act.

The proposed modification seeks to:

- extend the approved mining and surface development area northwest by approximately 87 hectares (ha);
- relinquish approximately 91 ha of approved surface development area that is no longer required;
- develop temporary off-path overburden emplacements and additional soil stockpile areas;
- re-align Nob Road around the extended surface development area; and
- amend the final landform to incorporate the extended mining area, which would include a final void of approximately 184 ha.

Tronox contends that the size of the final void is an outcome of changes approved under Modification 3. Under Modification 3, the height of the backfilled mine path was increased from between 2 and 4.5 m to 10 m. However, the final void was not amended to reflect the availability of backfill material under this modified scenario. On this basis, Tronox contends that the changes under the proposed modification are solely related to the location and configuration of the final void.

Part of the proposed extended mining area is located outside the site's Mining Lease (ML) boundary. Tronox advised that it has submitted a mining lease application to undertake mining activities in this new area, in accordance with the requirements of *Mining Act 1992*.

The proposed modification is depicted in **Figure 2** and **3**, and described in detail in Tronox's Modification Report (see **Appendix A**).

2.2 Justification for modification

Following the cessation of the project, Tronox intends to transition its workforce to the Atlas-Campaspe Mine, which is expected to commence operations in late 2021. However, based on the current schedule of mining, the project's approved resource is scheduled to be exhausted by mid-2020.

Tronox contends that the proposed modification would allow mining operations to continue for an additional one year and facilitate continuity of production and employment until mining operations commence at the Atlas-Campaspe Mine.

Continuity of mining would remain within the approved mine life (ie July 2026) and could be undertaken with no net increase in surface disturbance due to the proposed relinquishment of areas no longer required for disturbance.

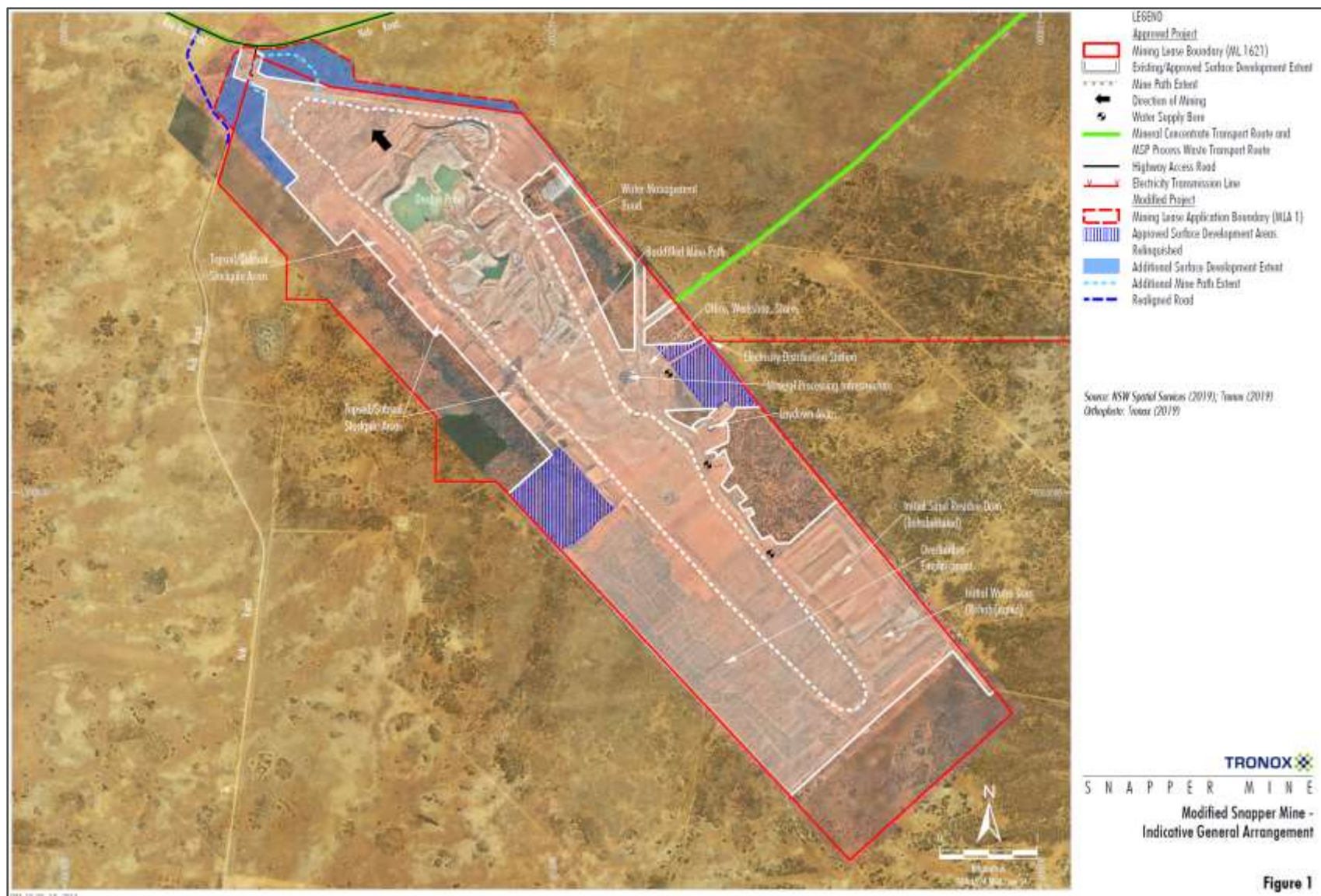


Figure 2 | Layout of Proposed Modification

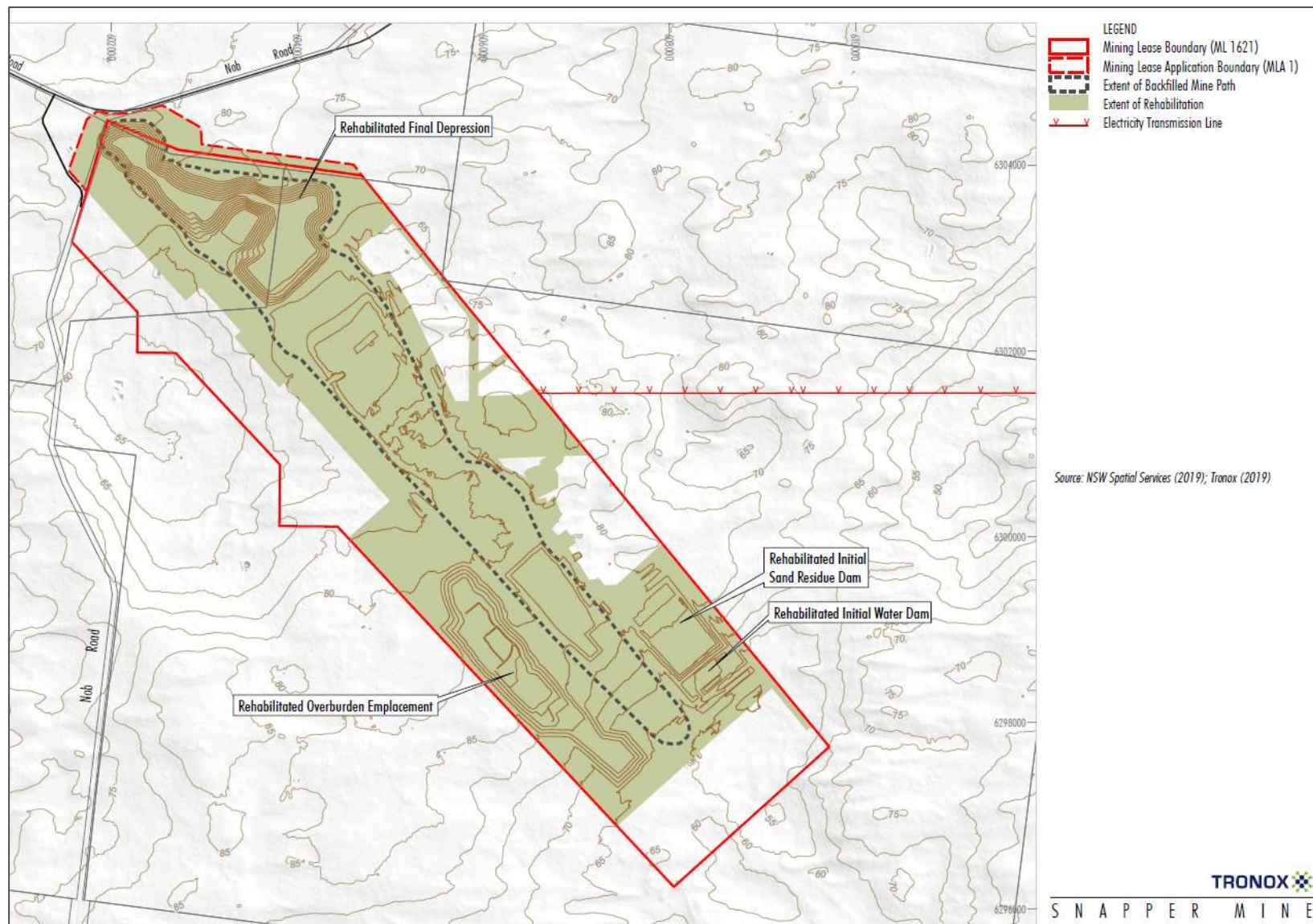


Figure 3 | Proposed Final Landform

3 Statutory context

3.1 Scope of modification

The project was approved under the now repealed Part 3A of the EP&A Act. Under clause 6 of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the project was transitioned to State Significant Development (SSD) by order, which took effect by publication in the *NSW Government Gazette* on 22 February 2019.

The modification application was lodged under Section 4.55(2) of the EP&A Act. Under Section 4.55(2), a development consent can only be modified if the consent authority is satisfied that the proposed development would remain substantially the same as the originally approved project. The Department has reviewed the scope of the modification and considers that it meets this requirement as:

- there would be no net increase in surface disturbance area due to the relinquishment of areas no longer proposed for disturbance;
- there would be no change to the approved project life, extraction limits, mining methods or hours of operation; and
- the impacts of the project as modified would be similar to those of the approved project (see **Section 5**).

Therefore, the Department considers that the proposed modification can be assessed and determined under section 4.55(2) of the EP&A Act.

3.2 Consent authority

The Minister for Planning and Public Spaces is the consent authority for the application under section 4.5(a) of the EP&A Act. However, under the Minister's delegation dated 9 March 2020, the Director – Resource Assessments may determine the application.

3.3 Mandatory matters for consideration

In accordance with Section 4.15(1) and Section 4.55(3) of the EP&A Act, the following must be considered in granting the modification application as relevant to the application:

- environmental planning instruments or proposed instruments;
- any planning agreement;
- *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation);
- likely impacts of the modification application, including environmental impacts on both the natural and built environments, and social and economic impacts;
- suitability of the site;
- any submissions;
- the public interest; and
- the reasons for granting approval for the original application.

The Department has considered all of these matters carefully and has summarised its findings below and in sections 4 and 5 of this report.

Environmental planning instruments or proposed instruments

A number of environmental planning instruments apply to the modification, including:

- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (the Mining SEPP);
- *State Environmental Planning Policy No. 33 (Hazardous and Offensive Development)*;
- *State Environmental Planning Policy (Infrastructure) 2007*;
- *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP);
- *State Environmental Planning Policy No. 55 (Remediation of Land)*; and
- Wentworth Local Environment Plan 2011.

The Department has considered the proposed modification against the relevant provisions of these instruments. The Department has also considered Tronox's consideration of the relevant instruments in its Modification Report. The Department has concluded that the proposed modification can be carried out in a manner that is generally consistent with the aims, objectives and provisions of these instruments.

The reasons for granting the consent for the original application

In determining the original Snapper Mineral Sands Mine application, the Minister concluded that the benefits of the project outweighed the impacts and imposed a range of strict conditions to appropriately manage the impacts. The Department has considered the proposed modification against the reasons the Minister provided for determining the project and considers that none of these reasons would preclude the approval of the application.

Objects of the EP&A Act

The consent authority has assessed the proposed modification against the current objects of the EP&A Act. The objects of most relevance to the decision on whether or not to approve the proposed modification are found in section 1.3 of the EP&A Act; and are:

- *Object 1.3(a): to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;*
- *Object 1.3(b): to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;*
- *Object 1.3(c): to promote the orderly and economic use and development of land;*
- *Object 1.3(e): to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;*
- *Object 1.3(f): to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);*

- *Object 1.3(i): to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State; and*
- *Object 1.3(j): to provide increased opportunity for community participation in environmental planning and assessment.*

The Department is satisfied that the proposed modification encourages the proper management and development of resources (Object 1.3(a)) and the promotion of the orderly and economic use of land (Object 1.3(c)). The proposed modification would optimise resource recovery, whilst utilising the mine's existing infrastructure and workforce.

The Department has considered the principles of ecologically sustainable development (ESD, Object 1.3(b)) in its assessment of the proposed modification. The Department considers that the proposed modification may be carried out in a manner that is consistent with the principles of ESD. The Department's assessment has sought to integrate all significant environmental, social and economic considerations. In particular, the Department considers that the proposed modification would result in social and economic benefits with minimal incremental environmental impacts.

The Department has carefully considered the environmental impacts of the proposed modification, including potential impacts on the natural, cultural and built environments (Object 1.3(e) and (f)). The key findings of the Department's assessment are summarised in **Section 5**.

Lastly, the Department publicly exhibited the modification application and consulted with key stakeholders, including Wentworth Shire Council (Objects 1.3(i) and (j)). The outcomes of the Department's consultation process are outlined in **Section 4**.

3.4 Impacts on biodiversity values

Under the relevant provisions of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*, the Department is satisfied that a Biodiversity Development Assessment Report is not required to be submitted with the application as the modification would not increase impacts on biodiversity values.

4 Engagement

4.1 Department's engagement

The Department publicly exhibited the application from 4 to 18 December 2019:

- on the Department's website;
- at the Department's former head office in Sydney;
- at the offices of Wentworth Shire Council and Broken Hill City Council; and
- at the Nature Conservation Council's office.

The exhibition of the modification application was advertised in the *Sunraysia Daily* and *Broken Hill Barrier Daily Truth*. Previous submitters were notified of the modification application and invited to make a submission. The modification application was also referred to relevant NSW Government agencies for advice, including Wentworth Shire Council and Broken Hill City Council.

The Department considers that the notification process met the requirements of clause 10 of Schedule 1 to the EP&A Act and clause 118 of the EP&A Regulation.

In response to the exhibition, the Department received one public submission from an adjacent leaseholder and advice from seven government agencies. Full copies of these submissions are provided in **Appendix B** and summarised below.

Tronox provided a Submissions Report, which responded to issues raised in submissions. Tronox also provided supplementary responses to additional requests for information. All documents were made available on the Department's website (see **Appendix C**).

4.2 Key issues raised in submissions

Government agencies

DPIE – Crown Lands

The Department's Crown Lands Group (DPIE – Crown Lands) identified that the proposed extended mining area is subject to a number of Western Lands Leases. On this basis, DPIE – Crown Lands:

- provided guidance on a number of matters relating to undertaking activities on Crown land, including consultation requirements for property access; and
- sought several clarifications about the scope of the proposed modification.

In its Submissions Report, Tronox provided additional information, particularly regarding rehabilitation, final land use and mine access. The Department notes that Tronox has commenced consultation with DPIE – Crown Lands and is required to obtain relevant approvals under the *Crown Lands Management Act*.

Biodiversity and Conservation Division

The Department's Biodiversity and Conservation Division (BCD) was satisfied that the proposed modification would not increase impacts on biodiversity values or increase the project's biodiversity offset requirement. However, BCD:

- recommended updating the Aboriginal Cultural Heritage Assessment Report to include survey transacts or grid co-ordinates; and
- requested clarification on various aspects of the hydrogeological assessment, including stygofauna impacts;
- requested increased frequency of groundwater monitoring (from monthly to daily), a brine management report and raw data from Monitoring Bore GW036669.

In its Submissions Report and supplementary correspondence, Tronox provided this additional information but advised that it considered BCD's requests relating to monitoring and brine management to be unnecessary. The Department has considered these matters further in **Section 5**.

Resources Regulator

The Resources Regulator advised that the modification would require an amendment to the project's Mining Operations Plan (MOP) and an updated Rehabilitation Cost Estimate. The Resources Regulator noted that the conditions of a mining authority granted under the *Mining Act 1992* require Tronox to implement a risk-based approach to achieving rehabilitation outcomes at its direction.

In response to Tronox's Submissions Report, the Resources Regulator sought clarification on how the size of the final depression was calculated and how long-term slope stability would be achieved.

These matters are further discussed in **Section 5**.

DPIE – Water Group

The Department's Water Group (DPIE – Water) requested:

- an estimate of the extension of groundwater drawdown associated with the extended mining area, including at the nearest private bore, having regard to the *Aquifer Interference Policy* (AIP) guidelines; and
- additional information to be provided following the determination of the application, including an updated monitoring bore schedule, calculation of evaporative losses and infiltration volumes associated with the enlarged final void.

Tronox estimated a maximum cumulative groundwater drawdown of 0.14 m, which is below the 2 m minimal impact threshold in the AIP. Tronox advised that the nearest private bore is located 16 km north-east of the mine, and as such, drawdown impacts would be negligible.

The Department notes that Tronox is required to consult with DPIE – Water in preparation of subsequent revisions to the Water Management Plan.

Other Public Authority Advice

Responses were also received from the Department's Division of Resources and Geoscience, Environment Protection Authority and Wentworth Shire Council, which did not raise any issues requiring further assessment.

Community and Special interest groups

The Department received one objection from an adjacent leaseholder (Manilla Property). This submitter raised concern that:

- the proposed final void would encroach on the leased landholding, which would affect fence maintenance, accessibility and livestock;
- the modified mine path would exacerbate noise issues at the property and voluntary mitigation measures had not yet been implemented; and
- the modified mine path would exacerbate dust issues at the property, particularly due to the direction of prevailing winds.

Tronox subsequently agreed to backfill the components of the final void located within the Manilla leasehold and committed to implementing noise mitigation measures. The Department notes that the proposed mitigation works have been voluntarily agreed to by Tronox and are not associated with noise exceedances under the Department's *Voluntary Land Acquisition and Mitigation Policy*.

The Department has considered the proposal's noise and air quality impacts in **Section 5**.

5 Assessment

The Department has undertaken a comprehensive assessment of the merits of the proposed modification in accordance with the requirements of the EP&A Act. The key issues for consideration in the assessment of the proposed modification relate to the final landform and groundwater. Consideration of these impacts is provided below, with consideration of other impacts provided in **Table 2**.

5.1 Final Landform

Tronox is seeking to amend the location and configuration of the final depression to incorporate the extended mine path. Tronox contends that all overburden material removed during the mine path extension would be used to backfill the mine path and therefore, the modification would not increase the size the final depression.

However, Tronox is also seeking to clarify the size of the final depression under the project approval to reflect landform height changes approved under Modification 3.

Originally, the final depression consisted of two smaller depressions with a combined area of 40 ha. Modification 3 approved an increase in the height of the backfilled mine path from between 2 and 4.5 m to 10 m, resulting in less material being available to backfill the final depression. However, at this time, the resultant size of the final depression was not specified.

The proposed final depression (see **Figure 4**) would consist of a single depression with an area of 184 ha. The increased size of the final depression reflects:

- increased landform heights in the backfilled mine path, approved under Modification 3;
- reduced batter slope gradients from 1:4 to between 1:5 and 1:10 (proposed); and
- a reduced depression depth from 44 to 41 m below ground level (proposed).

The depression would be backfilled between 2 and 4 m above the water table and revegetated to achieve a final land use of light intensity grazing.

Tronox advised that the proposed final landform could meet existing rehabilitation objectives in the project approval, including that the landform would be safe, stable, non-polluting, self-sustaining and integrated with the surrounding landscape.

The Department notes that the size of the proposed final depression is smaller than what is currently approved in the project's Mining Operations Plan (MOP), which contains a single final depression of approximately 250 ha (see **Figure 5**). The MOP adopts a site-specific risk-based approach to achieving effective and sustainable rehabilitation and has been progressively updated over the duration of mining, in consultation with the Resources Regulator.

The Resources Regulator advised that the proposed modification would require an amendment to the MOP prior to the commencement of activities in the extended mining area and sought clarification on how long-term slope stability would be achieved. Tronox advised that rehabilitation slopes of similar

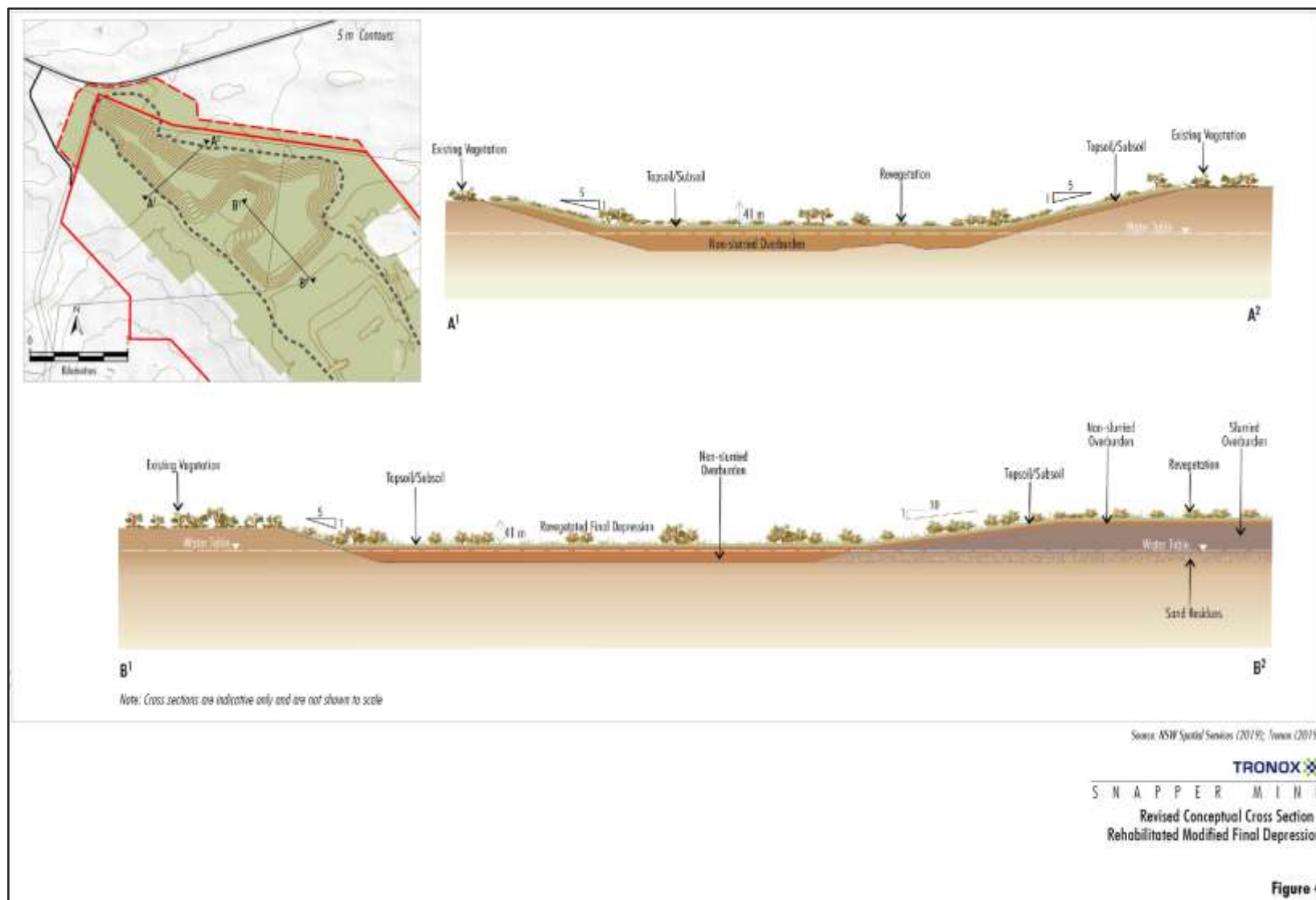


Figure 4 | Proposed Final Depression

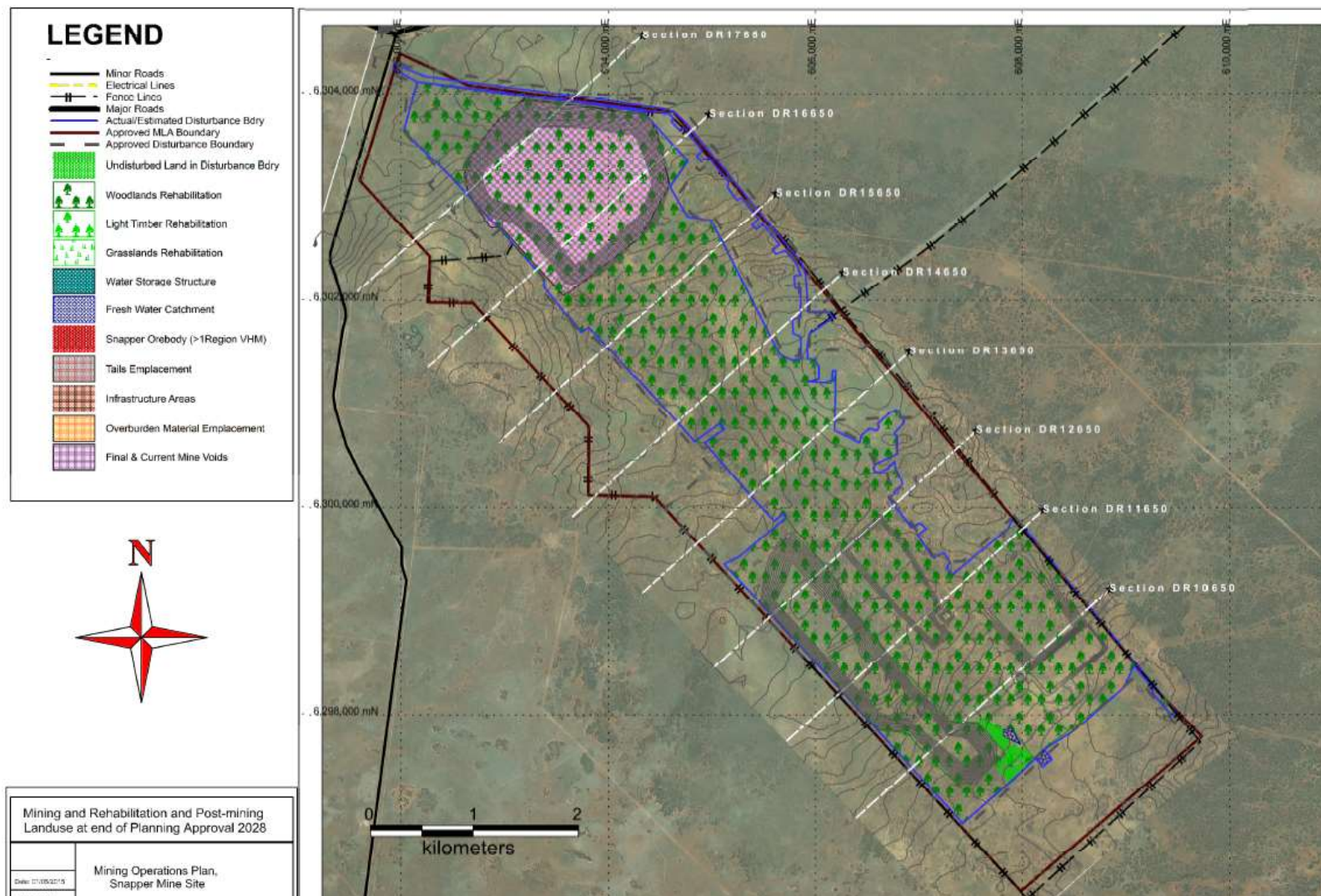


Figure 5 | MOP 2015-2020 Final Landform

gradients at the Gingko Mine had demonstrated competency since their establishment and that further slope stability analysis would be provided in the next revision of the MOP.

The Department notes that subsequent revisions to the MOP would incorporate detailed mine closure planning prepared in accordance with applicable rehabilitation guidelines. On this basis, the Department considers that the proposed amendments to the final landform could be managed to achieve sustainable rehabilitation outcomes.

5.2 Water Resources

The project's mineral deposit is located within the shallow saline aquifer of the Loxton-Parilla Sands (upper aquifer). The natural groundwater table varies above and below this deposit and therefore, dredge mining of the resource requires the maintenance of a dredge pond by pumping groundwater in and out.

Tronox advise that the proposed modification would not change the existing water demands of the site and that it holds sufficient allocation under the *NSW Murray Darling Basin Porous Rock Groundwater Sources 2000 Water Sharing Plan* (Western Murray Porous Rock Water Source).

The proposed modification would extend the mine path by approximately 600 m, which would result in some additional drawdown in the upper aquifer. The closest private bore (Greenwell) is located approximately 16 km north east of the mine and is expected to experience a maximum drawdown of 0.14 m. This level reflects a further reduction of 0.04 m in comparison to existing drawdown impacts.

Tronox advise that no adverse change to salinity have occurred since the commencement of extraction and that negligible changes are predicted as a result of the proposed modification.

On this basis, the modification would not result in exceedance of the minimal impact considerations of the *NSW Aquifer Interference Policy*.

BCD raised concern regarding groundwater monitoring bore GW036669 due to declining groundwater levels in holes 2 and 3. This bore is located between the Snapper and Gingko mines. Additionally, BCD requested that groundwater monitoring frequency increase from monthly to daily via the installation of water pressure loggers.

The Department notes that groundwater impacts associated with the proposed modification are likely to be minor and that the concerns raised by BCD primarily relate to the site's existing monitoring network and approved operations. The Department considers that these matters should be further considered in the next revision of the site's Water Management Plan. The project's existing conditions require all management plans to be reviewed and updated within three months of the determination of a modification application.

BCD also requested further details of brine production associated with the proposed modification. Tronox advised that the project's reverse osmosis plant is currently operating at approximately 5 percent of its approved capacity, and therefore, the proposed modification would not result in any increase to approved brine production limits. On this basis, the Department considers that no further information is required.

In summary, the Department considers that the groundwater impacts of the proposed modification are minor and acceptable.

5.3 Other issues

The Department has considered other potential impacts of the proposed modification, which are summarised in **Table 2**.

Table 2 | Summary of other issues raised

Issue	Findings	Recommended condition
Biodiversity	- The proposed modification would extend the development footprint to the north by 87.4 ha. However, Tronox has committed to relinquish 90.7 ha of approved surface development area which is no longer required for disturbance. - On this basis, the proposed modification would result in a net reduction of surface disturbance by 3.3 ha. - The proposed disturbance area consists predominantly of Aeolian Chenopod Shrublands (81 ha) that is subject to high intensity grazing. - No threatened flora or fauna species were detected in this area during targeted surveys. - Areas proposed for relinquishment predominantly consist of Semi-arid Sandplains Woodland and Tronox's Biodiversity Assessment concluded that these areas reflect better quality habitat with connectivity to existing offset areas. - Tronox proposes to undertake vegetation clearing in accordance with its existing Flora and Fauna Management Plan. - BCD advised that the proposed modification would not increase impacts on biodiversity values or result in an increase to the biodiversity offset requirement. - The Department agrees with these findings and considers that existing conditions remain appropriate for the modified project.	No additional conditions required.
Cultural heritage	- Tronox provided an Aboriginal Cultural Heritage Assessment (ACHA) which included findings of a field survey of the proposed extended mining area. - The ACHA was also provided to Registered Aboriginal Parties (RAPs) in accordance with the	No additional conditions required.

Issue	Findings	Recommended condition
	<i>Aboriginal cultural heritage consultation requirements for proponents (2010).</i> • No Aboriginal cultural heritage items or sites were identified in the proposed extended mining area. • No RAPs objected to the proposed modification. • Tronox advised that it would continue to manage Aboriginal cultural heritage matters in accordance with its existing Cultural Heritage Management Plan. • The Department considers that there would be minimal impacts on Aboriginal cultural heritage as a result of the proposed modification.	
Road traffic	• To accommodate the extended mining area, Tronox proposes to realign Nob Road and its intersection with Roo Roo Road. • Background traffic volumes on these roads are low, with an average of 32 vehicles per day travelling on Nob Road (south of Roo Roo Road) and an average of 24 vehicles per day travelling on Roo Roo Road (west of Nob Road). • The realigned road would be constructed as a Class 4B unsealed road with a basic right and left turn (BAR/BAL) intersection with Roo Roo Road that would meet minimum sight distance requirements. • The realigned road would be approximately 350 m longer than the existing configuration and have negligible impacts on travel times. • Council did not raise any concerns with the proposed realignment. • Tronox proposes to manage the realignment in accordance with its Transport Management Plan and the requirements of Council and DPIE - Crown Lands. • The Department considers that the traffic impacts of the proposed modification are acceptable, subject to the recommended conditions.	• The Department has recommended that the realignment of Nob Road is undertaken to the satisfaction of Council, as the relevant roads authority. • The Department has recommended contemporary updates to the Transport Management Plan, including the identification of measures to manage potential road safety and access issues associated with the realignment.

Issue	Findings	Recommended condition
Surface water	• The mine is located within the lower Darling River Basin of the lower Murray River system. • There are no well-defined drainage channels located within the proposed extended mining area. • Surface water impacts associated with the existing and proposed project are expected limited due to the distance of mining activity from any significant water system. • Tronox proposes to continue to implement management measures under its existing Water and Land Management Plans, which include erosion and sediment controls and soil management measures. • The Department considers that existing water management conditions remain appropriate for the modified project.	• No additional conditions are required.
Air quality	• The proposed modification would reduce the distance between surface development areas and the nearest receiver from approximately 3.6 km to 3.3 km (ie by 300 m). • The adjacent leaseholder raised concerns regarding the proposed modification's potential to exacerbate dust deposition on its property. • However, there would be no change to the size of soil stockpiles and dust generated from overburden haulage would reduce by approximately 30 percent due to the closer proximity of the temporary emplacement areas. • On this basis, Tronox advise that total dust emissions from the site would reduce and it could continue to comply with air quality criteria prescribed under <i>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA 2017)</i>. • The Department considers that air quality impacts associated with the proposed modification are negligible.	• The Department has recommended contemporary revisions to the project's air quality conditions, including: - revising the annual average PM₁₀ criterion to 25 µg/m³, to reflect current standards; and - requiring the implementation of reasonable and feasible mitigation measures to reduce dust emissions from the site.
Noise	• Tronox has predicted that the modified operation could continue to comply with existing noise criteria (ie 35 dB(A)) during all periods. • Tronox has voluntarily committed to implement noise mitigation measures at the Manilla	•

Issue	Findings	Recommended condition
	Homestead. The Department notes that these activities are not associated with noise exceedances under the Department's <i>Voluntary Land Acquisition and Mitigation Policy</i>. - EPA did not raise any noise concerns associated with the proposed modification and advised that no variations to the site's Environment Protection Licence would be required. - The Department considers that the existing noise conditions remain appropriate for the modified project.	
Visual impacts	- The proposed modification would extend mining operations closer to Roo Roo Road and Nob Road. - As such, there would be visibility of temporary supporting infrastructure from some sections of these roads. - Tronox advises that all infrastructure would be decommissioned at the completion of mining and that visual impacts would be minor due to the very low volume of traffic on these roads. - Permanent visual impacts associated with the final depression are also considered to be minor due to its low elevation and the presence of intervening vegetation. - No changes to visual impacts are predicted for private receivers, the nearest of which is located 4 km north of the mine.	No additional conditions are required.
Social and economic	- The proposed modification would provide continued employment of approximately 110 workers for an additional 12 months. - The continued employment is also expected to enable an uninterrupted transition of the Snapper workforce to Tronox's Atlas-Campaspe Mine, which is expected to commence operations in late 2021. - Without the proposed modification, Tronox advises that production of mineral concentrate would reduce significantly, which would disrupt existing supply contracts. - The extended mining area would facilitate approximately 170,000 tonnes of additional mineral	No additional conditions are required.

Issue	Findings	Recommended condition
	concentrate product and would provide royalties to NSW worth approximately \$2.3 million. The proposed modification would have negligible changes to existing social impacts.	
Greenhouse gas emissions	- Increases to total greenhouse gas emissions associated with the proposed modification are expected to be minor. - Tronox proposes to continue to implement measures to energy saving measures in accordance with its Energy Saving Environmental Management Plan.	No additional conditions are required.

6 Evaluation

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act, and in consultation with relevant Government agencies.

The proposed modification would enable Tronox to maintain operations at the mine for an additional 12 months within the approved mine life, and allow for uninterrupted employment of 110 workers prior to their transition to the Atlas-Campaspe mine. The proposed modification would also enable continued supply of mineral concentrate which would generate approximately \$2.3 million in royalties to NSW.

The Department considers that these benefits can be achieved with minimal incremental environmental impacts, particularly as:

- there would be a net reduction in surface disturbance of 3.3 ha;
- proposed amendments to the final landform could be managed to achieve sustainable rehabilitation outcomes;
- traffic impacts associated with the realignment of Nob Road would be minor; and
- groundwater impacts would be negligible and there would be no exceedances of the minimal impact considerations of the *NSW Aquifer Interference Policy*.

The Department has recommended revisions to existing conditions of approval which reflect advice from Government agencies and commitments made by Tronox to mitigate the proposed modification's impacts.

The Department has drafted a Notice of Modification in (**Appendix E**) as well as a consolidated version of the approval (**Appendix F**) as proposed to be modified.

Tronox has reviewed and agreed to the recommended conditions.

Based on its assessment, the Department considers that the proposed modification is in the public interest and should be approved, subject to stringent conditions of approval

7 Recommendation

It is recommended that the Director – Resource Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report;
- **determines** that the application falls within the scope of section 4.55(2) of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- **agrees** with the key reasons for approval listed in the notice of decision (**Appendix D**);
- **modifies** the project approval MP 06_0168;
- **signs** the attached Notice of Modification (**Appendix E**).

Recommended by:



Andrew Rode

Senior Environmental Assessment Officer
Energy, Resources and Compliance Division

8 Determination

The recommendation is **Adopted** / Not adopted by:



18 March 2020

Steve O'Donoghue

Director – Resource Assessments

Energy, Resources and Compliance Division

(as delegate of the Minister for Planning and Public Spaces)

Appendices

Appendix A – Modification Report

Refer to the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>

Appendix B – Submissions

Refer to the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>

Appendix C – Submissions Report

Refer to the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>

Appendix D – Notice of Decision

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>

Appendix E – Notice of Modification

Refer to the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>

Appendix F – Consolidated Consent

Refer to the Department's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/25616>