



Atlas-Campaspe, Snapper & Ginkgo Mines & Broken Hill MSP Modifications

Short-Term Ore Transport and Processing

Modification Assessment

(SSD-5012 MOD 3, MP06_0168 MOD 8, DA251-09-01 MOD 15 & DA345-11-01 MOD 8)

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1 Introduction

Tronox Mining Australia Limited (Tronox) owns and operates the Atlas-Campaspe Mineral Sands Mine (Atlas), the Snapper Mineral Sands Mine (Snapper), the Ginkgo Mineral Sands Mine (Ginkgo) and the Broken Hill Mineral Separation Plant (MSP), all of which are located in the Murray-Darling Basin in the Far-West region of NSW (see **Figure 1**). Tronox’s mineral sands mining and processing operations in this area are collectively referred to as the Murray-Darling Basin Operations (MDBO).

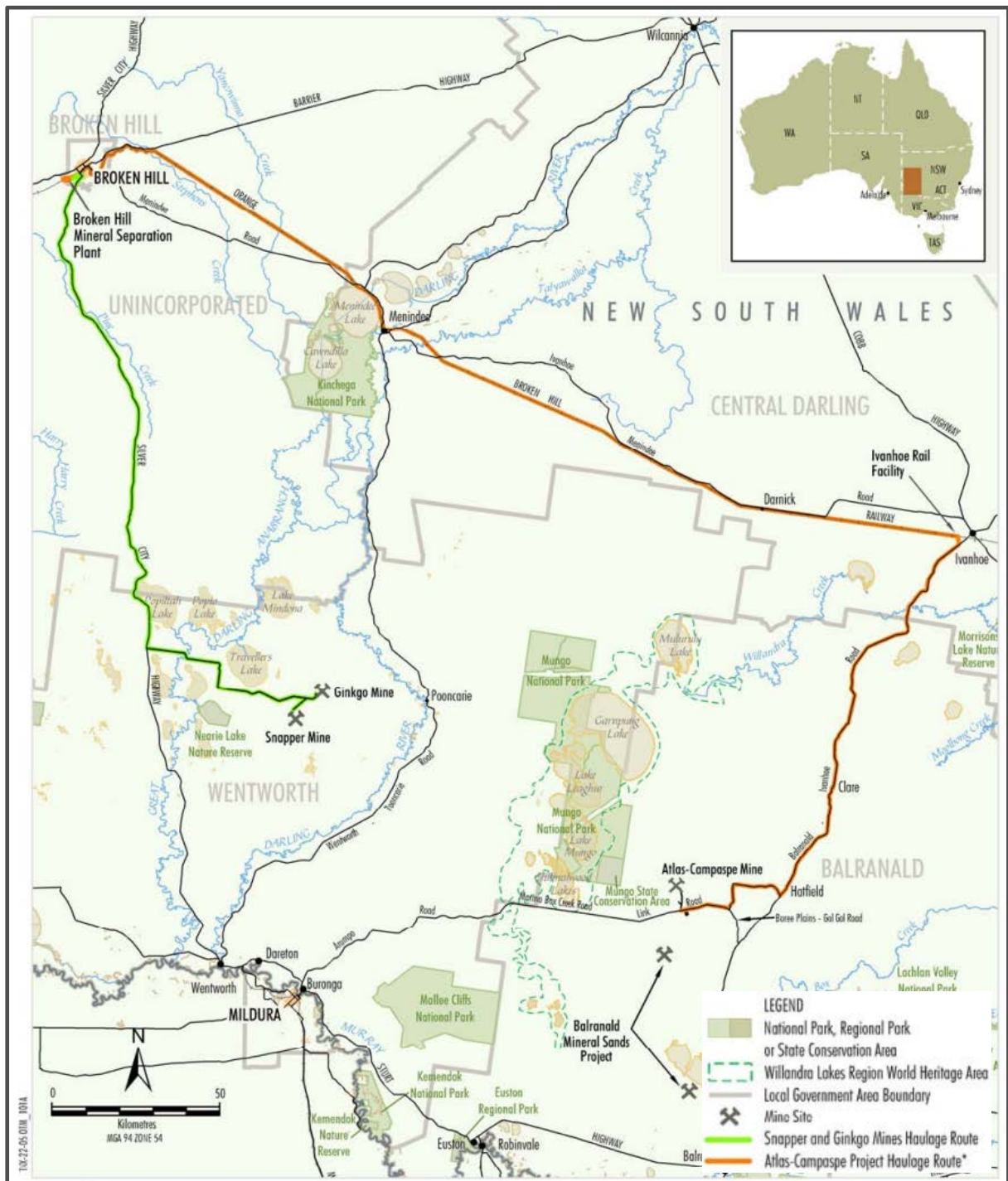


Figure 1 | Regional Location (Source: MDBO Modification Report, Tronox)

2 Proposed Modifications

The Atlas-Campaspe project was approved in 2014 and construction commenced in 2018, with operations planned to commence in April 2022 to coincide with the winding down of production at Snapper. However, due to COVID-19 related supply chain issues, the delivery of key components for the approved mineral processing infrastructure has been delayed by approximately six months.

To avoid a delayed commencement of production at Atlas, Tronox is seeking approval to transport ore (rather than mineral concentrate) from Atlas to the other MDBO sites for processing until the mineral processing infrastructure at Atlas is installed. This requires modifications to the development consents/project approvals for all the MDBO projects.

The modifications would involve the following short-term changes to the approved MDBO projects:

- Ore would be transported from Atlas direct to the MSP via the approved haulage routes and at the approved transport rate.
- At the MSP, the Atlas ore would be unloaded from the trains onto existing stockpile areas before being loaded onto empty mineral concentrate haulage vehicles for transport via the approved haulage routes to Snapper and/or Ginkgo.
- At Snapper and/or Ginkgo, the Atlas ore would be unloaded for processing in the primary concentrator to produce mineral concentrate. The waste (coarse reject and sand residues) would be disposed of in the mine path at Snapper and/or Ginkgo.
- The Atlas mineral concentrate would be transported back to the MSP via the approved haulage routes at the approved transport rate.
- At the MSP, the Atlas mineral concentrate would be processed consistent with the approved MSP operations.

The MDBO modifications would not change the approved haulage routes or vehicle movements and would remain within the approved production and transport limits described in the respective MDBO approvals.

Once the Atlas mineral processing infrastructure is commissioned and mineral concentrate is being produced, the MDBO would revert back to the currently approved operations.

3 Statutory Context

3.1 Scope of Modifications

The proposed changes would require amendments to each of the MDBO development consents, including:

- Atlas-Campaspe Project (SSD 5012);
- Snapper Mineral Sands Mine (06-0168);
- Ginkgo Mineral Sands Mine (DA 251-09-01); and
- Broken Hill Mineral Separation Plant (DA 345-11-01).

The modification applications were lodged under Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Department has reviewed the scope of the modification applications and considers that:

- there would be minimal environmental impacts;

- the proposed changes are temporary and minor in comparison to the developments as originally approved;
- there would be no change to the approved mine life, mining methods, production rates, project boundaries, disturbance footprints or hours of operation at any of the MDBO sites; and
- all four developments would remain substantially the same as originally approved.

Therefore, the Department is satisfied the proposed modifications are within the scope of section 4.55(1A) of the EP&A Act and that the applications should be assessed and determined under section 4.55(1A) of the EP&A Act.

3.2 Consent Authority

The Minister for Planning (the Minister) is the consent authority for the modification applications under section 4.5(a) of the EP&A Act. However, under the Minister's delegation of 9 March 2022, the Director, Resource Assessments, may determine the applications. This is because Tronox has not made any reportable political donations and the four relevant Councils did not object to the proposed modifications.

3.3 Mandatory Matters for Consideration

The Department has considered the relevant matters required in accordance with section 4.15(1) of the EP&A Act including the objects of the Act, applicable environmental planning instruments, the likely impacts of the modification applications, site suitability and the public interest. The Department has also considered the reasons for the granting of the original applications in its assessment and is satisfied that the proposed modifications do not affect the decisions that were previously made.

3.4 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles for all decision making under the act. They must be considered by the consent authority when determining a development application under the act. The Department has assessed the modified projects against the objects found in Section 1.3 of the EP&A Act.

3.5 Impacts on Biodiversity Values

Section 7.17 of the *Biodiversity Conservation Act 2016* specifies that if the approval authority is satisfied that a modification would not increase the impacts of a development on biodiversity values, a biodiversity development assessment report (BDAR) is not required. The Department considers that there would be no increase in impacts on biodiversity values from the modification at any of the developments and consequently a BDAR report is not required.

4 Engagement

In accordance with the requirements for Section 4.55(1A) modifications, the proposal was not formally exhibited. Nevertheless, the Department made the modification applications and modification report publicly available on the Department's website and referred it to the Environment Protection Authority, the Resources Regulator, Mining, Exploration & Geoscience, Transport for NSW, Balranald Shire Council, Broken Hill City Council, Wentworth Shire Council and Central Darling Shire Council.

The **Environment Protection Authority (EPA)** noted that the modification activities would not require a variation to any environment protection licences held by Tronox. The EPA had no further comments to make.

The **Resources Regulator** did not require any further information for the modification and noted that under the *Mining Act 1992*, the Resources Regulator requires Tronox to adopt a risk-based approach to achieving the required rehabilitation outcomes.

Department of Regional NSW – Mining, Exploration & Geoscience (MEG) noted the benefits and commented that transporting ore to other MBDO sites for processing would be preferable to delaying operations as it would lead to the earlier utilisation of the mine workforce and royalty and tax payments.

Transport for NSW (TfNSW) requested additional clarification in relation to the MDBO’s operations on the road network. The Department has reviewed the additional information provided by Tronox and is satisfied that there would be no increase in traffic impacts compared to the approved projects.

Balranald Shire Council (Balranald) raised no concerns with the proposed modification.

Broken Hill City Council (Broken Hill) did not raise any concerns about the proposal and noted that the modifications would not create any adverse impact on the Broken Hill Local Government Area (LGA).

Wentworth Shire Council (Wentworth) did not make any comments.

Central Darling Shire Council (Central Darling) did not raise any concerns about the proposal and noted that the impact to roads from the increased vehicle movements would be mitigated under the existing conditions of consent for Atlas (which require the company to make annual contributions to Council for road maintenance).

5 Assessment

The Department has assessed the modification applications and supporting information in accordance with the relevant requirements of the EP&A Act, including the matters for consideration, as set out in section 4.55(1A) of the EP&A Act.

The Department considers the key assessment issues for the proposed modifications relate to potential transport and rehabilitation impacts associated with the modifications. The Department’s assessment of these and other issues relevant to the proposed modifications is summarised in **Table 1** below. The Department considers that other issues associated with the proposed modifications such as amenity, noise and air quality impacts would not increase and can be adequately managed under the existing MDBO approvals.

Table 1 | Summary of Department’s Assessment

Issue	Findings / Recommendations
Transport	<p><i>Atlas-Campaspe Mine</i></p> <ul style="list-style-type: none"> The Atlas and MSP approvals currently allow mineral concentrate to be transported from Atlas to the MSP. The modifications would allow ore instead of mineral concentrate to be transported from Atlas to the MSP on a short-term basis via the approved haulage route. The modification would not change the approved road and rail haulage route (including operations at the Ivanhoe Rail Facility), haulage vehicle type or haulage vehicle frequency. <p><i>Broken Hill MSP</i></p> <ul style="list-style-type: none"> Mineral concentrate is currently transported from Snapper and Ginkgo to the MSP. If approved, the modifications would allow the empty mineral concentrate haulage vehicles to be backloaded with the Atlas ore and transported from the MSP to Snapper and/or Ginkgo

Issue**Findings / Recommendations**

via the approved haulage route.

- There would be no additional haulage vehicle movements as the Atlas ore would be transported in empty mineral concentrate haulage vehicles returning to the Snapper and/or Ginkgo Mines.

Snapper and Ginkgo Mines

- The current conditions in the Snapper and Ginkgo approvals allow up to 975,000 tonnes per annum (tpa) of mineral concentrate to be transported from either Snapper or Ginkgo to the MSP. Tronox is winding down its operations at Snapper and has reduced the amount of mineral concentrate being transported from that mine. This means that the transport of the additional Atlas mineral concentrate haulage would not increase the truck movements above the approved limits between Snapper and the MSP.
- Overall, the combined Atlas, Snapper and Ginkgo mineral concentrate transport rate would remain within the approved limits and no additional haulage vehicle movements would be required.
- The Atlas mineral concentrate would be transported from Snapper and/or Ginkgo to the MSP via the approved haulage route on a short-term basis.

Recommendations

The Department has recommended conditions in the Atlas-Campaspe Consent (SSD 5012) to allow the transport of mineral concentrate or ore, for a period of 12 months from the date of determination of Modification 3.

Rehabilitation*Atlas-Campaspe Mine*

- The modification would not significantly change the approved final landform at Atlas as the total amount of sand residues and coarse rejects generated at the mine would be reduced by up to approximately 280,000 tonnes (t). This represents approximately 0.3% of the total approved to be disposed of.

Snapper and Ginkgo Mines

- The 280,000 t of sand residues and coarse rejects from the Atlas ore would instead be generated at Snapper or Ginkgo, where it would represent an increase of around 0.1% of the total amount of residues and rejects approved to be disposed of at those mines.
- The additional sand residues and rejects would be disposed of within the active mining areas at these mines, which would result in a minor reduction in the size of the approved final depressions at the Snapper and/or Ginkgo Mines

Recommendations

The Department has not recommended any changes to conditions.

Water**Resources***Atlas-Campaspe Mine*

- The modifications would not increase the approved water demand as there would be no changes to the mining method or rate, or mineral processing method or rate. Instead, there would be a short-term reduction in water demand at Atlas when mineral processing occurs.
- Potential impacts on groundwater resources associated with the mining operations would also not change as the mine path extent and the mining method and rate would remain unchanged as a result of the modifications.

Snapper and Ginkgo Mines and Broken Hill MSP

- The modifications would not change the approved water use at Snapper or Ginkgo.

Recommendations

The Department has not recommended any changes to conditions.

6 Evaluation

The Department has assessed the modification applications and supporting information in accordance with the relevant requirements of the EP&A Act, including the relevant matters for consideration.

The Department considers that the modifications would allow for the commencement of production at Atlas, which would avoid any potential production shortfalls for Tronox in 2022 and bring forward benefits to the local and NSW economies in the form of employment and payment of taxes and royalties.

The Department also considers that the modifications would be unlikely to increase the impacts of the project/s and that the existing and recommended conditions would be adequate to manage the impacts of the modifications.

The Department has recommended some minor changes to the rehabilitation conditions to reflect recent regulatory reforms under the *Mining Act 1992*. Additionally, the Department has recommended a condition that allows the transport of ore from Atlas to the MSP.


The Department considers that the proposed modifications should be approved subject to the amended conditions. The Department has drafted an Instrument of Modification (see **Appendix B**) for the proposed modifications, as well as a consolidated versions of the approvals as modified (see **Appendix C**).

7 Determination

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

- **considers** the findings and recommendations of this report
- **determines** that the applications (SSD-5012 MOD 3, MP06_0168 MOD 8, DA251-09-01 MOD 15 & DA345-11-01 MOD 8) fall within the scope of section 4.55(1A) of the EP&A Act
- **forms the opinion** under section 7.17(2)(c) of the *Biodiversity Conservation Act 2016* that a BDAR is not required to be submitted as the application would not increase the impacts of the project on biodiversity values
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modifications
- **modifies** the consents (SSD-5012 MOD 3, MP06_0168 MOD 8, DA251-09-01 MOD 15 & DA345-11-01 MOD 8)
- **signs** the attached Instrument of Modifications (**Appendix B**).

Recommended by:

 19/07/2022

Brittany Golding
Planning Officer
Resource Assessments

Recommended by:

 19/07/2022

Rose-Anne Hawkeswood
Team Leader
Resource Assessments

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



20/7/2022

Stephen O'Donoghue

Director

Resource Assessments

as delegate of the Minister for Planning

Appendices

Appendix A – Modification Report

Appendix B – Instrument of Modifications

Appendix C – Consolidated Development Consents

For all documents in relation to the **Atlas-Campaspe Mineral Sands Mine**, refer to the Departments website at: <https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-ore-mod>

For all documents in relation to the **Snapper Mineral Sands Mine**, refer to the Departments website at: <https://www.planningportal.nsw.gov.au/major-projects/projects/mod-8-ore-transport-mod>

For all documents in relation to the **Ginkgo Mineral Sands Mine**, refer to the Departments website at: <https://www.planningportal.nsw.gov.au/major-projects/projects/mod-15-ore-transport-mod>

For all documents in relation to the **Broken Hill Mineral Separation Plant**, refer to the Departments website at: <https://www.planningportal.nsw.gov.au/major-projects/projects/modification-8-ore-transport-mod>