

ASSESSMENT REPORT

TARRAWONGA AND ROCGLLEN COAL MINES

Coal Haulage Modification (11_0047 MOD 3 and 10_0015 MOD 3)

1 BACKGROUND

Whitehaven Coal Limited (Whitehaven) owns and operates a number of coal mines in north-western NSW, including the Tarrawonga, Rocglen open cut coal mines in the Gunnedah and Narrabri local government areas (see Figure 1).

These mines currently transport run-of-mine (ROM) coal via a combination of private haul roads and public roads to the Whitehaven Coal Handling and Preparation Plant (CHPP) near Gunnedah for processing (see Figure 1). Product coal is then transported by rail to Newcastle Port for export.

The approved haulage route can be divided into three discrete sections (see Figure 1) and is used to transport coal to the CHPP and coal rejects back to the two mines and includes:

- a northern section (Rangari Road, Hoad Lane and Blue Vale Road), servicing Tarrawonga;
- an eastern section (Shannon Harbour Road), servicing Rocglen; and
- a southern section (Blue Vale Road and the Kamilaroi Highway) used for cumulative transport of coal from the two mines.

The southern section would also be used for the Vickery Coal Project which has been approved, but has not yet commenced.

Whitehaven is approved to transport up to:

- 1.5 million tonnes per annum (Mtpa) of ROM coal from Rocglen along the eastern section;
- 3 Mtpa of ROM coal from Tarrawonga along the northern section;
- 4.5 Mtpa of ROM coal from Vickery along the southern section;
- 3.5 Mtpa of cumulative ROM coal from Rocglen, Tarrawonga and Vickery along the southern section, prior to an overpass on the Kamilaroi Highway being constructed (approved as part of the Vickery Coal Project); and
- 4.5 Mtpa of cumulative ROM coal from the three mines following the construction of the overpass.

2 PROPOSED MODIFICATION

Whitehaven is seeking to modify the Tarrawonga and Rocglen approvals to increase the cumulative volume of ROM coal transported from 3.5 to 4 Mtpa without construction of the Kamilaroi Highway overpass. This increase was initially requested for the 2016 and 2017 calendar years only. However, Whitehaven has since advised the Department that it is now only seeking the proposed increase for the 2017 calendar year.

In its application, Whitehaven highlighted that lower strip ratios (the amount of overburden to coal required to be removed) at the Tarrawonga mine has provided an opportunity to temporarily increase ROM coal production during 2017. Whitehaven argues that if the temporary increase in coal haulage is not approved, both mines would reduce rostered hours and employee numbers, meaning that the incremental benefits of the project to the workforce and local community would be foregone.

Importantly, the modification application would not increase the approved ROM extraction limits for Tarrawonga or Rocglen mines or the road transportation operating hours.

The proposed modification (Mod 3) is described in detail in the attached Environmental Assessment (EA) (see **Appendix A**).

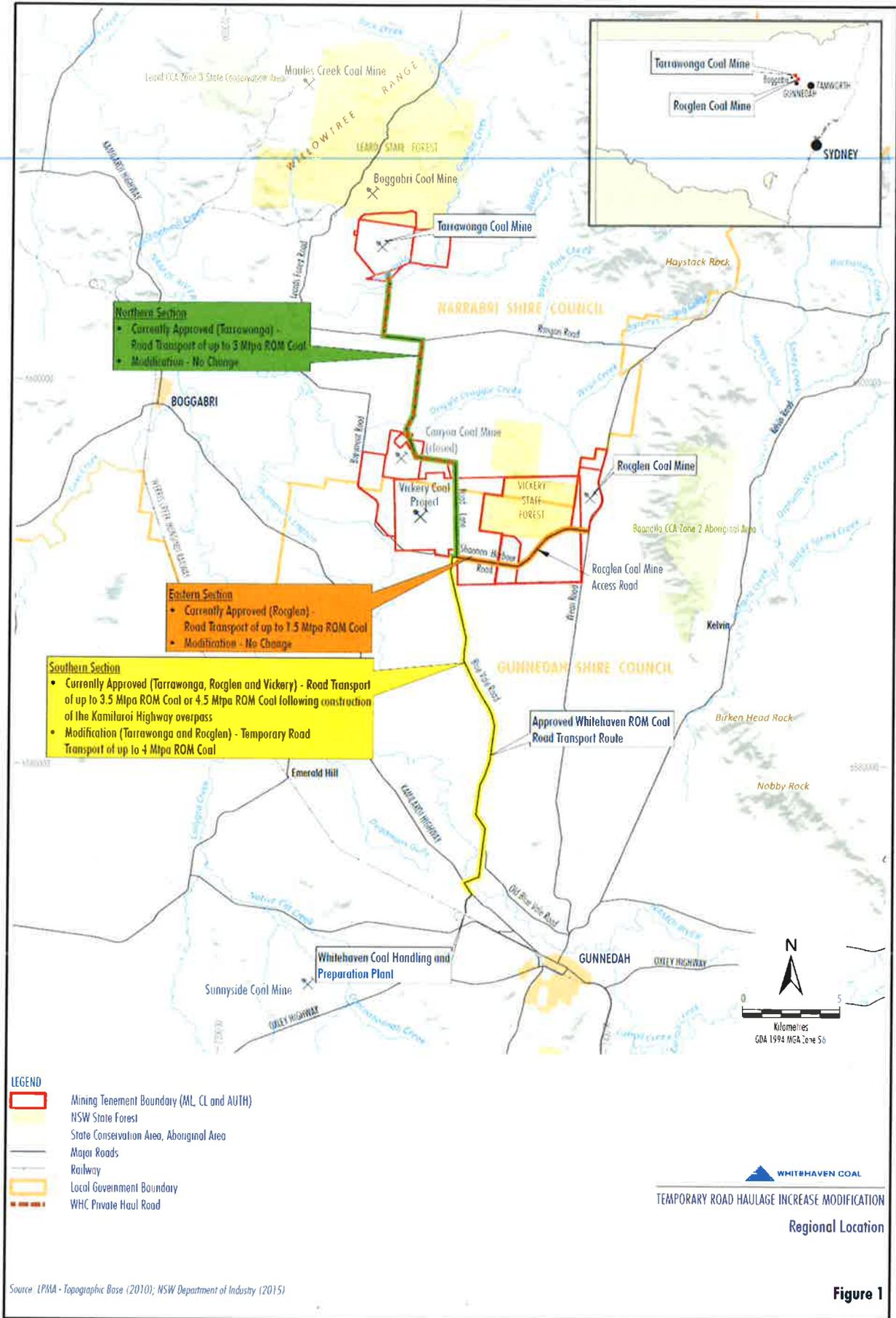


Figure 1: Regional Context

3 STATUTORY CONTEXT

The Tarrawonga and Rocglen Coal Mines were approved under Part 3A of the EP&A Act in January 2013 and April 2008 respectively.

Although Part 3A was repealed on 1 October 2011, the mines remain 'transitional Part 3A projects' under Schedule 6A of the EP&A Act, and hence any modification to the approvals are to be made under the former Section 75W of the Act.

The Department is satisfied that the applications can be characterised as modifications to the existing approvals as the proposals would not:

- alter the mining methods;
- require additional infrastructure;
- increase the extraction of ROM coal;
- alter the total production of coal over the life of the mines; or
- significantly increase the environmental impacts of the approved projects.

Given these considerations, the Department is satisfied that the proposals are within the scope of Section 75W, and may be determined accordingly.

Under section 75W of the EP&A Act, the Minister for Planning is the approval authority for the modification application. However, under the Minister's delegation dated 16 February 2015, the Executive Director, Resource Assessments & Business Systems, may determine the applications, as there was only 1 objection received during the exhibition period.

4 CONSULTATION

The Department publicly exhibited the applications and accompanying EA from 20 October until 3 November 2016.

During the public exhibition period, the Department:

- advertised the exhibition of the applications in the Narrabri North West Courier and Gunnedah Namoi Valley Independent;
- made the applications and accompanying documentation available on its website, at the Nature Conservation Council, and at Narrabri and Gunnedah Shire Council offices; and
- consulted with key government agencies.

The Department received 4 submissions including 3 from government agencies and 1 from the general public located in the greater Sydney area, which objected to the modification.

A summary of submissions is shown in **Table 1** and full copies are included in **Appendix B**.

Table 1: Summary of Submissions

Submitters	Number	Objection / Support
Agency:	3	3 Comments
<ul style="list-style-type: none"> • Narrabri Shire Council (NSC) • Gunnedah Shire Council (GSC) • Roads and Maritime Service (RMS) 		
Community	1	
Approx. distance from Tarrawonga / Rocglen Mines:		
<ul style="list-style-type: none"> • >300 km 	1	Object
TOTAL	4	1 Objection

To supplement the formal exhibition process, Whitehaven consulted with RMS, NSC, and GSC prior to lodging the modification application. At the request of the Department, Whitehaven also consulted with the landowners of properties adjacent to the haulage route. The key concern raised by landholders was dust emissions along the haul route. In response, Whitehaven detailed a range of measures that are

underway to address this issue, including extending the use of Council street sweeper along the haul route, investigating the use of dust suppressants, making improvements to water cart nozzles and cleaning road signs and guide posts. Consultation undertaken by Whitehaven is summarised in Section 1.2 of the EA.

The Department visited the site during the assessment of the application, and notes that none of the affected landholders located along the haulage route lodged a submission.

4.1 Agencies

While none of the agencies objected to the proposed modification, the RMS and Gunnedah Shire Council commented on particular aspects of the proposed changes to the existing conditions.

Gunnedah Shire Council proposed that the existing road maintenance agreement be updated to increase Whitehaven's contributions so that maintenance of the haulage route could be increased to improve signage, delineation and pavement conditions.

The **RMS** raised concerns about trucks merging onto the Kamilaroi Highway between the Blue Vale Road and Whitehaven CHPP intersections, and recommended a range of measures be included in a revised Traffic Management Plan prior to the proposed increase in haulage, including a protocol for managing haulage activities along the Kamilaroi Highway, preparation of a signage and marking plan, and additional requirements for the existing driver's code of conduct.

Narrabri Shire Council did not have any comments on the modification application.

4.2 Public Submission

The public submission objecting to the proposed modification raised issues that relate to climate change. Specifically, the submission noted that the increase in road haulage does not support Australia's commitment to the Paris Agreement and does not consider the negative impacts of climate change. The submission also noted that the modification application would result in increased noise, dust and truck movements that would impact the local community.

4.3 Response to Submissions

Whitehaven has provided a response to the issues raised in the submissions (see **Appendix C**). The Department has considered this response in its assessment of the merits of the modification.

5 ASSESSMENT

In assessing the merits of the modification application, the Department has considered the:

- current conditions of approval;
- the modification application and EA;
- submissions and response to submissions;
- relevant environmental planning instruments, policies and guidelines; and
- the requirements of the EP&A Act.

The Department believes that the main potential impacts from the modification would be traffic and road safety and increased road noise associated with the increased truck traffic along the approved southern haulage route.

Traffic and Road Safety

The transport of an additional 0.5 Mt of ROM coal by road would require (on average), an extra 88 extra vehicle movements during weekdays along the southern transport section, including one additional movement during the night time shoulder period (0600-0700 hours).

This would represent a 14% increase in average weekday truck movements, from 612 to 700 trips, including return truck movements, either empty trucks or returning coal reject for emplacement at the mines. This equates to on average an additional 6 truck movements per hour during weekday operations.

The Department acknowledges that Whitehaven Coal, in seeking approval for the Vickery Coal Project, committed to constructing a private haul road and overpass over the Kamilaroi Highway for cumulative coal haulage from the three mines of more than 3.5 Mtpa. This commitment was based on the existing approved haulage limit for the Tarrawonga and Rocglen mines and was to ensure there would be no increase in traffic impacts on the Highway.

Given this commitment, Whitehaven did not undertake a traffic assessment of increased truck movements on the Kamilaroi Highway. Therefore the traffic and road safety impacts from an increase in truck movements on the Kamilaroi Highway was not assessed for the Vickery Coal Project.

To address this, for this modification Whitehaven engaged GTA Consultants (GTA) to undertake a traffic impact assessment of the proposed modification, including a road safety audit and a review of peak hour merging conditions on the Kamilaroi Highway. The traffic assessment concluded that the existing road system would continue to operate at a good level of service (LOS A)¹ along Blue Vale Road and at key intersections, including the intersections with the Kamilaroi Highway.

Notwithstanding, the RMS raised concerns over road safety relating to acceleration-merging-deceleration of trucks between the two intersections along the Kamilaroi Highway. In particular, concerns were raised about the speed differential between trucks entering/exiting the Highway within a 100 km/h zone.

Whitehaven currently manages this interaction by requiring its truck drivers to take the following actions:

- give way to through traffic on the highway by regulating speed in the acceleration/ merge lane to allow faster-moving vehicles to pass; and
- enter the deceleration lane (to turn right) at the first opportunity.

GTA undertook a further assessment of the performance of this section of the highway (see **Appendix D**). This assessment found that the sight distances and average traffic volumes result in a low risk to other road users, but that additional signage and line markings would further improve road safety.

Based on the additional assessment, the RMS accepted that Whitehaven would be able to address merging risks on the Kamilaroi Highway through the implementation of appropriate transport protocols, driver awareness and monitoring programs.

Nonetheless, to address increased risks associated with seasonal peaks in background traffic (for example during the Gunnedah Field Days), the RMS recommended that specific traffic control measures be implemented during these times, including temporary speed restrictions along the highway consistent with RMS's *Traffic Control at Worksites Manual*.

The Department agrees with RMS's advice, and has revised the requirements for the Traffic Management Plan to incorporate and implement Whitehaven's commitments and recommendations from the traffic assessment and RMS's recommendation for additional controls during seasonal peak traffic periods.

Further, to ensure these measures are implemented in a timely manner, the recommended conditions require Whitehaven to submit a revised Traffic Management Plan by 31 March 2017, following consultation with RMS and the two Councils.

Overall, the Department is satisfied that with additional controls during peak traffic periods and the implementation of Whitehaven's commitments, GTA's and RMS's recommendations, any incremental impacts associated with the increased coal haulage during 2017 can be appropriately managed.

Road Noise

Wilkinson Murray undertook a noise impact assessment in accordance with the *NSW Road Noise Policy*.

¹ Level of Service (LOS) is a qualitative measure of road operational conditions with LOS A ranking providing the best traffic conditions down to LOS E where traffic conditions are close to capacity.

The proposed increase in haul truck movements would result in an incremental increase (up to 0.5 dB) of daytime noise levels for receivers located along Blue Value Road. However, these noise levels are predicted to be below the relevant road traffic noise criteria.

There would also be a negligible (up to 0.3 dB) increase at the "Longlands" residence, located on the Kamilaroi Highway, near the entry to the CHPP. The assessment found that the day time road noise criterion of 60dB(A) at this residence would be exceeded for traffic flows for existing truck movements as well as for the increase of truck movements during the day time period – increasing from 61.1 to 61.4 dB(A).

However, this exceedance includes substantial contributions from background heavy vehicle and light vehicle traffic along the Kamilaroi Highway. Whitehaven argues that traffic counts, which informed noise predictions for the modification application, were influenced by additional vehicle movements associated with the 2016 Gunnedah Field Days, and that typically traffic noise at this receiver would be substantially lower.

The Department is satisfied that the predicted increase in day time noise above current levels would be imperceptible at this residence. Further, the Department notes that the proposed haulage increase would be temporary and that none of the potentially affected landholders raised concerns regarding road noise.

On this basis, the Department is satisfied that impacts to landholders as a result of incremental increases in noise predictions would not be significant.

Other Impacts

Table 2 summarises the Department's consideration of other issues associated with the proposed modification.

Table 2 – Assessment of Other Issues

<i>Issue</i>	<i>Potential impacts and consequences</i>	<i>Conclusion & Recommendation</i>
<i>Greenhouse emissions</i>	<ul style="list-style-type: none"> Greenhouse gas emissions associated with the modification application would not change beyond what has already been assessed and approved for combined tonnages up to 4.5 Mtpa from the three mines. 	<ul style="list-style-type: none"> Comply with existing conditions.
<i>Air Quality</i>	<ul style="list-style-type: none"> Dust from the road pavement was a concern raised directly by landholders located near the CHPP access road to Whitehaven during its consultation on the modification. Whitehaven identified mitigation measures including street sweeping along the CHPP access road and adjoining Kamilaroi Highway, use of dust suppressants on internal CHPP roads and improvements to the truck wash configuration at the CHPP. Whitehaven has also committed to additional funds towards the road inspection and maintenance program for the haulage route, in consultation with Council. 	<ul style="list-style-type: none"> Revise existing management air quality management plans, based on consultation outcomes

6 RECOMMENDED CONDITIONS

The Department has prepared a Notice of Modification for each of the Tarrawonga and Rocglen project approvals (see **Appendices E1 and E2**) for the proposed modification as well as consolidated versions of the project approvals as modified (see **Appendices F1 and F2**).

In summary, the proposed amendments to the conditions include:

- an increase from 3.5 to 4.0 Mtpa the cumulative haulage of coal to the CHPP for 2017;
- updates to the existing Traffic Management Plans to include:
 - a proposed program for implementing Whitehaven's commitments, recommendations of the road safety audit and recommendations made by RMS and Council;
 - an updated drivers code of conduct; and
 - a protocol for coal haulage along the Kamilaroi Highway and during peak traffic periods.

Whitehaven provided comments on the recommended conditions and the Department has considered these comments in its determination.

7 CONCLUSION

The Department has assessed the merits of the proposed modification in accordance with the relevant requirements of the EP&A Act, including the objects of the Act and the principles of ecologically sustainable development.

The Department acknowledges the concerns raised in submissions, but is satisfied that:

- the changes would be temporary and limited to the calendar year 2017;
- assessment of the temporary increase in coal haulage shows that the existing haul road network has sufficient capacity to maintain a high level of service without the need for road upgrades; and
- merging risks can be managed through appropriate transport protocols, driver awareness and monitoring programs.

Consequently, the Department considers that the proposed modification should be approved, but that increased coal haulage be limited to 2017 and managed through a revised Traffic Management Plan in consultation with RMS.

8 RECOMMENDATION

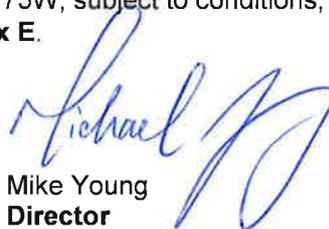
It is RECOMMENDED that the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister:

- **considers** the findings and recommendations of this report;
- **determines** that the two modifications fall within the scope of section 75W of the EP&A Act;
- **approves** the two applications under section 75W, subject to conditions; and
- **signs** the notices of modification in **Appendix E**.



9/2/17

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9/2/17.

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