



# ***Tarrawonga and Rocglen Coal Mines***

*Modification Assessment  
(11\_0047 MOD 6 and  
10\_0015 MOD 4)*

WHITEHAVEN  
COAL TRUCKS  
CHANNEL 20



October 2018

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### **Cover photo**

Whitehaven Haulage Route (Source: Whitehaven Coal Limited)

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## Executive Summary

Whitehaven Coal Limited (Whitehaven) transports run-of-mine (ROM) coal from the Tarrawonga and Rocglen coal mines to the Gunnedah Coal Handling and Preparation Plant (CHPP) near Gunnedah via Blue Vale Road and the Kamilaroi Highway.

In 2017, the Department approved a modification allowing Whitehaven to increase the amount of coal that could be transported along the 18 km southern section of the route from 3.5 million tonnes per annum (Mtpa) to 4 Mtpa for the 2017 calendar year.

Whitehaven is seeking to extend this temporary increase for the 2018 calendar year, which would allow it to continue to transport coal from the Rocglen and Tarrawonga mines to the CHPP for a further 2 months of the calendar year. Whitehaven has been operating at this increased rate since early 2017 and has effectively managed the increase in traffic through its Traffic Management Plan.

Gunnedah Shire Council (Council) and Roads and Maritime Services (RMS) are the roads authorities for the road transport route and neither agency objected to the modifications. RMS requested that ongoing pavement maintenance on the 680-metre length of the Kamilaroi Highway that is part of the transport route be undertaken. Council and Whitehaven have agreed to incorporate maintenance of this section of the route into the existing road maintenance agreement already required under the project approval for the Tarrawonga Coal Mine.

The extension of time for increased haulage during 2018 would allow the benefits of an additional 0.5 million tonnes of coal, with associated coal royalties and economic and employment benefits, to be realised.

Conversely, 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, along with the broader economic benefits of increased royalties to NSW.

The Department's assessment found that any impacts associated with the continued haulage of 4 Mtpa for 2018 would be minimal, and therefore the Department has recommended that the modifications to the two project approvals be approved.



## 1. Introduction

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

These mines currently transport ROM coal via a combination of private haul roads and public roads to the Whitehaven CHPP near Gunnedah for processing. Product coal is then transported by rail to Newcastle Port for export.

The approved haulage route used to transport coal to the CHPP and coal rejects back to the two mines can be divided into three discrete sections:

- 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 transport of coal from both mines.

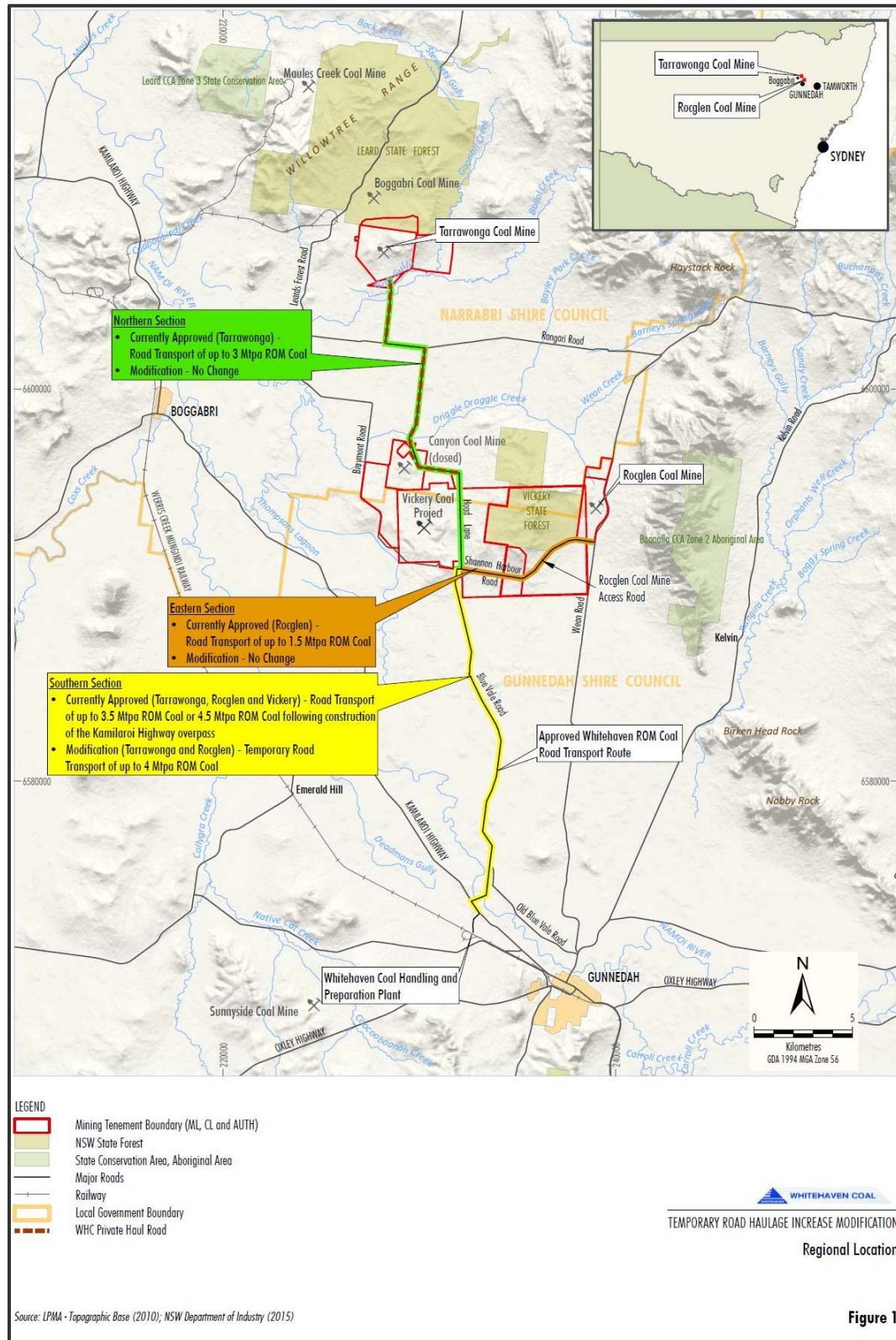


Figure 1 | Regional Context



Whitehaven currently has approval 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 (the Vickery Coal Mine has not yet commenced);
- 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.

In 2017, the Department approved a temporary increase to the amount of coal that could be transported along the 18 km southern section of the haulage route. This temporary increase allowed Whitehaven to transport 4 Mtpa along that section of the route for the 2017 calendar year, without construction of the Kamilaroi Highway overpass.



## 2. Proposed Modification

Whitehaven is seeking further modifications to the Tarrawonga and Rocglen approvals to extend the period of time that 4 Mtpa of coal can be transported along the southern section of the route to the 2018 calendar year.

Lower strip ratios (the amount of overburden required to be removed per tonnage of coal extracted) at the Tarrawonga mine means that Whitehaven has been able to maintain increased ROM coal production rates during 2018. 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.

A further extension beyond the 2018 calendar year is not proposed or envisaged given the scheduled cessation of operations of the Rocglen Coal Mine in 2019.

The proposed modification (Mod 4) is described in detail in the attached Environmental Assessment (EA) (see **Appendix B**)



## 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.

Under clause 6 of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the projects were transitioned to State Significant Development (SSD) by order that took effect by publication in the NSW Government Gazette on 17 August 2018.

Whitehaven submitted related applications to the Department under Section 4.55 (1A) on 25 September 2018 for modifications involving minimal environmental impact.

The Department is satisfied that the applications can be characterised as minor modifications to the existing approvals as the proposal 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.

The Minister for Planning is the consent authority for the modification applications. However, under the Minister's delegation dated 11 October 2017, the Director, Resource and Energy Assessments, may determine the applications as no reportable political donations were made and Gunnedah Shire Council did not object to the proposal.



## 4. Engagement

The Department made the modification applications and supporting documentation publicly available on its website from 2 October 2018. Given the minor nature of the applications, the Department did not formally seek submissions on the applications but referred the applications to the Roads and Maritime Authority (RMS) and Gunnedah Shire Council (Council), which are the road authorities for the roads affected by the proposed modifications.

Whitehaven also consulted directly with 11 landholders with residences close to the southern haulage route and sought feedback on the proposal to extend the increased haulage. None of these landholders raised concerns with the proposed modification.

**Council** did not object to the proposal.

**RMS** recommended Whitehaven be required to resurface the Kamilaroi Highway between Blue Vale Road and the Whitehaven CHPP. The Department notes that Whitehaven is already required to contribute to maintenance on the roads used by project traffic in accordance with a road maintenance agreement with Council. Council and Whitehaven have agreed to update this agreement to include the section of Kamilaroi Highway identified by RMS.

The Council and RMS advice and Whitehaven's response to the advice is included in **Appendix C**.



## 5. Assessment

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

- current conditions of approval;
- the modification application and EA;
- agency advice and Whitehaven's response to the advice; and
- the requirements of the EP&A Act.

A list of the key documents that informed the assessment is provided in **Appendix A**.

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.

The Department notes that Whitehaven has been hauling coal along the transport route at the current rate for more than 20 months, since early 2017. The modification would allow the current haulage rate to continue for the remainder of the 2018 calendar year.

### 5.1 Traffic

The transport of an additional 0.5 Mt of ROM coal by road requires (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 represents 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.

However, Whitehaven provided a traffic impact assessment undertaken by GTA Consultants (GTA) as part of its application for the temporary increase in road haulage during the 2017 calendar year. This included 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)<sup>1</sup> along Blue Vale Road and at key intersections, including the intersections with the Kamilaroi Highway.

The Department notes that during the period of increased cumulative haulage since early 2017, there have been no complaints and no safety incidents involving Whitehaven coal haulage operations.

Neither Gunnedah Shire Council nor RMS raised concerns about traffic safety in relation to the proposed increased cumulative haulage for the 2018 calendar year.

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<sup>1</sup> 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.

Whitehaven is required to operate in accordance with an approved Traffic Management Plan that includes transport protocols and driver awareness and monitoring programs. Whitehaven has also implemented some additional controls, including temporary speed restrictions along the highway, during seasonal peak traffic periods, including the during the 2017 and the 2018 Gunnedah Field Days, to address any increased risks associated with these times.

With the continued implementation of the Traffic Management Plan, the Department considers that Whitehaven can continue to manage any incremental impacts associated with the increased coal haulage for the remainder of the 2018 calendar year.

## 5.2 Noise

Whitehaven provided a traffic impact assessment undertaken by Wilkinson Murray as part of its application for the temporary increase in road haulage during the 2017 calendar year, which remains relevant for the current modification applications.

The noise assessment demonstrated that the 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 would be below the relevant road traffic noise criteria under the *NSW Road Noise Policy*.

Noise monitoring undertaken in 2018 (since the temporary increase in haulage was approved) at the two closest residences along Blue Vale Road identified no exceedances of the road traffic noise criteria.

The 2017 Wilkinson Murray noise assessment found traffic noise at one residence ("Longlands", which is located on the Kamilaroi Highway near the entry to the CHPP), would increase from 61.1 to 61.4 dB(A), noting the existing levels exceed the *NSW Road Noise Policy* day time road traffic criterion of 60dB(A). However, this increase included substantial contributions from non-project related traffic along the Kamilaroi Highway, and was predicted to occur with or without the additional truck movement from the increased coal haulage.

The Department considers that the predicted increase of <0.5 dB(A) in day time noise above current levels would be imperceptible at this residence. Further, following consultation with the landholders by Whitehaven, none of the potentially affected landholders raised concerns regarding road noise.

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

## 5.3 Other Issues

**Table 1** summarises the Department's consideration of other issues associated with the proposed modification.

**Table 1** | Assessment of other Issues

Issue	Potential impacts and consequences	Recommendation
Greenhouse emissions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comply with existing conditions.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>The haul route comprises sealed roads and Whitehaven would continue to implement dust control measures including covering haul trucks to minimise potential dust emissions.</li> <li>The Department considers that increased emissions of dust from the modification would be negligible.</li> </ul>	<ul style="list-style-type: none"> <li>Comply with existing conditions.</li> </ul>





## 6. *Evaluation*

The Department has assessed the merits of the proposed modification in accordance with the relevant requirements of the EP&A Act.

The modification would allow the current coal haulage rate, which has occurred since early 2017, to continue for the 2018 calendar year.

The Department considers that that road safety risks have been, and can continue to be, effectively managed through the existing transport protocols and driver awareness and monitoring programs, and that the haul road network has sufficient capacity to maintain a high level of service without road upgrades.

Council and Whitehaven have agreed to include the section of Kamilaroi Highway between Blue Vale Road and the CHPP in the road maintenance agreement, which addresses the concerns raised by the RMS.

The Department considers that there would be minimal increase in impacts from the proposed modifications compared to the approved projects, with the current rate of haulage continuing for the 2018 calendar year.

Further, the proposal would allow Whitehaven to continue to benefit from favourable mining conditions and maintain full employment to the end of the year. Conversely, if the modifications were not approved, Whitehaven would be required to cease haulage and reduce mining operations for the remainder of the year.

Consequently, the Department considers that the modifications can be approved.



## 7. Recommendation

The Department has prepared a Notice of Modification for each of the Tarrawonga and Rocglen project approvals (see **Appendices D** and **E**) for the proposed modification as well as consolidated versions of the project approvals as modified (see **Appendices F** and **G**).

The proposed amendments extend the period of time that 4.0 Mtpa of coal may be hauled to the CHPP to the 2018 calendar year.

The Department has also proposed some minor administrative changes to reflect revised names of NSW Government Departments.

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

- **considers** the findings and recommendations of this report; and
- **determines** that the two modifications fall within the scope of section 4.55(1A) 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 grant approval to the applications;
- **modifies** the project approvals (11\_0047 and 10\_0015); and
- **signs** the attached approval of the modifications (**Appendices D** and **E**).


Recommended by:

 30/10/18

**Rose-Anne Hawkeswood**

Senior Environmental Assessment Officer  
Resource and Energy Assessments

Recommended by:

 30/10/18.

**Stephen O'Donoghue**

Team Leader  
Resource and Energy Assessments



## 8. Determination

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

 1/11/18.

**Mike Young**

Director  
Resource and Energy Assessments



# Appendices

## Appendix A – List of Documents

The Department has considered the:

- Whitehaven Temporary Road Haulage Modification Environmental Assessment, September 2018 (Appendix B);
- advice from RMS and Gunnedah Shire Council and Whitehaven's response to the advice (Appendix C);
- existing conditions of approval;
- relevant environmental planning instruments, policies and guidelines; and
- relevant requirements of the EP&A Act.

## Appendix B – Environmental Assessment

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9637](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9637) and

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9638](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9638)

## Appendix C – Agency Advice and Whitehaven’s Response

Refer to the Department’s website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9637](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9637) and  
[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9638](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9638)

C1 – Gunnedah Shire Council Advice

C2 – Roads and Maritime Authority Advice

C3 – Whitehaven’s Response to Agency Advice



## Appendix D – Notice of Modification - Tarrawonga

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9637](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9637)

## Appendix E – Notice of Modification - Rocglen

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9638](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9638)

## Appendix F – Consolidated Approval - Tarrawonga

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9637](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9637)

## Appendix G – Consolidated Approval - Rocglen

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9638](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9638)