



22 July 2016

**BY EMAIL**

Mike Young  
Manager – Mining Projects  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

[mike.young@planning.nsw.gov.au](mailto:mike.young@planning.nsw.gov.au)

Dear Mike,

**WHITEHAVEN COAL LIMITED – TARRAWONGA COAL MINE REJECTS DISPOSAL  
MODIFICATION (MOD 2) AND ENVIRONMENTAL ASSESSMENT**

I am writing to you in regard to the disposal of coal reject materials at the Tarrawonga Coal Mine (Tarrawonga).

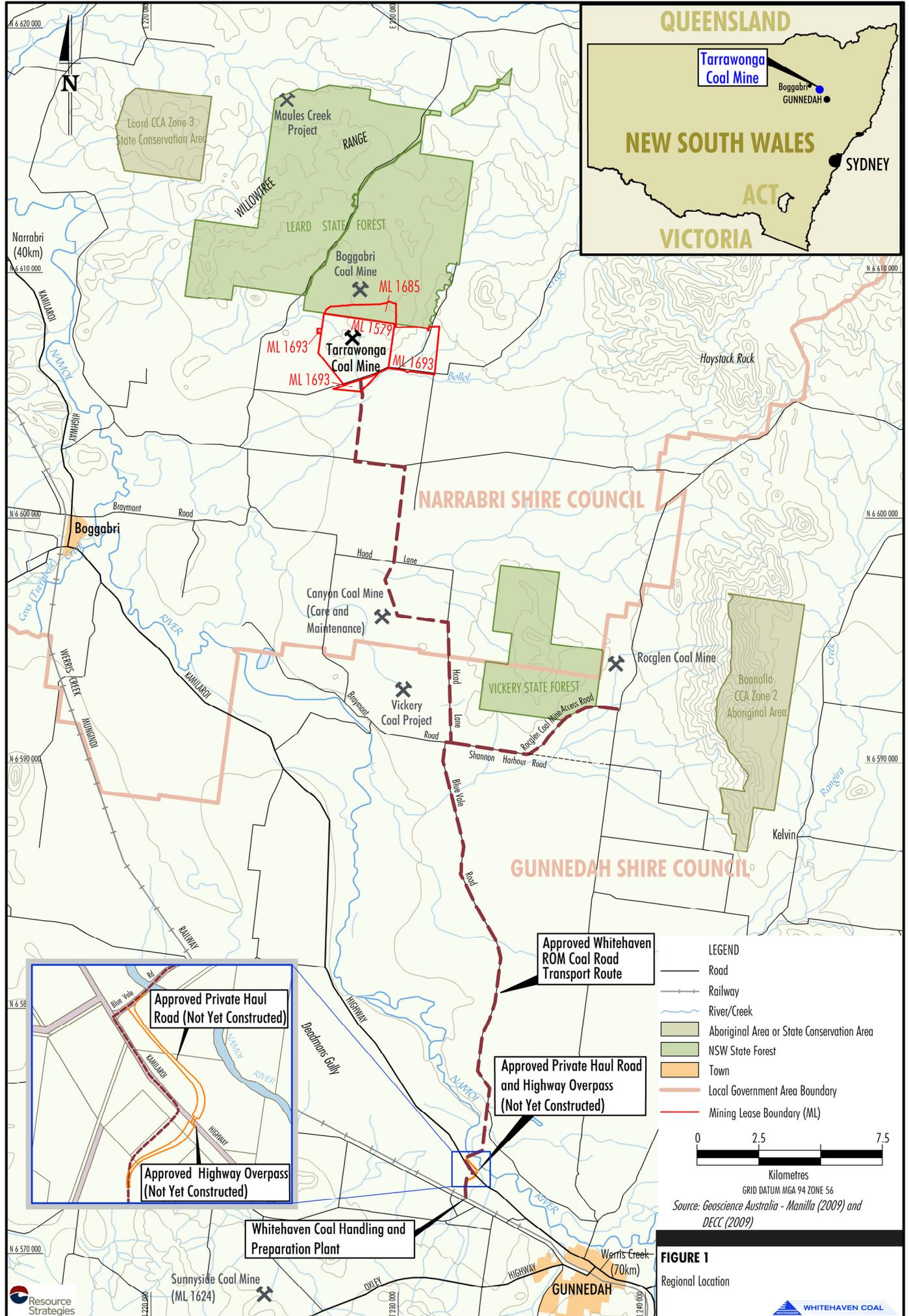
Tarrawonga is located approximately 42 kilometres (km) to the north-northwest of Gunnedah in New South Wales (NSW) (**Figure 1**). Tarrawonga is owned and operated by Tarrawonga Coal Pty Ltd, which is a joint venture between Whitehaven Coal Mining Pty Ltd (a wholly owned subsidiary of Whitehaven Coal Pty Ltd [Whitehaven]) (70 percent [%] interest) and Boggabri Coal Pty Ltd (30% interest) and is operated by Whitehaven.

Whitehaven proposes to modify the rejects disposal strategy at Tarrawonga to allow the disposal of varying types of coal reject material including:

- coarse rejects;
- fine rejects; and
- blended coarse and dewatered fine rejects.

Please find attached to this letter an application to modify the Tarrawonga Project Approval (PA 11\_0047) under Section 75W of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) (MOD 2).

This letter provides a description of the existing Tarrawonga operations and proposed modification, a justification for the proposed change, and an environmental assessment.



**FIGURE 1**

Regional Location

## Tarrawonga Coal Mine

### Description of the existing operations and approvals

Mining operations at Tarrawonga are conducted in accordance with Project Approval (PA 11\_0047), which was granted by the NSW Planning Assessment Commission under delegation from the then NSW Minister for Planning & Infrastructure pursuant to section 75J of the EP&A Act on 22 January 2013. In accordance with Project Approval (PA 11\_0047) Tarrawonga is approved to extract up to 3 million tonnes per annum (Mtpa) of ROM coal until the end of December 2030.

Crushed and screened coal is transported from Tarrawonga to the Whitehaven Coal Handling and Preparation Plant (CHPP) located approximately 40 km to the south of Tarrawonga by a fleet of on-highway haulage trucks (e.g. B-Doubles).

As well as coal from Tarrawonga, the Whitehaven CHPP washes coal sourced from Rocglen Coal Mine, and in future may wash coal from the Vickery Coal Mine (once commissioned), and Sunnyside Coal Mine (when operating) in accordance with Development Consent (DA0079.2002) (as modified). Coal rejects produced at the Whitehaven CHPP can include reject material derived from coal from one or more of these mines as coal is blended and processed to meet customer specifications.

From the Whitehaven CHPP, up to 2,000 tonnes (t) per day of coarse rejects are currently approved to be backloaded onto haul trucks and transported to Tarrawonga for emplacement. The approved reject disposal strategy at Tarrawonga includes placement of coarse reject material in layers up to 15 metres (m) thick, with each layer covered with a minimum of 2 m of inert material.

Currently, fine rejects produced at the Whitehaven CHPP are either pumped to a series of ponds where they are partially dewatered before being transported for disposal at the former Gunnedah Colliery (specifically the Melville Open-Cut) or dewatered using belt press filters where the resultant filter cake is blended with coarse reject producing a blended reject product. This product is currently back loaded to Rocglen Coal Mine and co-disposed in the overburden dumps.

Product coal from the Whitehaven CHPP is loaded onto trains for dispatch to customers via the Werris Creek Mungindi Railway.

In November 2014 the Minister for Planning modified the Tarrawonga approval under Section 75W of the EP&A to permit the transportation of up to 3 Mtpa of Tarrawonga run-of-mine (ROM) coal to the Whitehaven CHPP along the approved Whitehaven ROM Coal Road Transport Route for the life of the approved mine.

MOD 1 did not change the management or disposal methods of coal rejects at Tarrawonga.



## **Description of the proposed change to the Tarrawonga Coal Mine**

Whitehaven proposes to modify the rejects disposal strategy at Tarrawonga to allow the disposal of varying types of coal reject material including:

- coarse rejects;
- fine rejects; and
- blended coarse and dewatered fine rejects.

Whitehaven proposes to continue to dispose of reject material at Rocglen and the Melville Open Cut up to a maximum volume of 700,000t per annum, with the majority of this material to be disposed at Rocglen over its remaining mine life (i.e for the next three to four years).

During this time, it is also proposed to commence disposal of fine reject material (either a coarse and fine blend and/or fines alone) at Tarrawonga. Disposal of up to 700,000tpa of rejects material is proposed at Tarrawonga after disposal at Rocglen concludes. This quantity of rejects is based on the processing of 3Mt of ROM coal per year and an assumed washing yield in accordance with the Gunnedah CHPP approval limit.

The reject material would be co-disposed with overburden from Tarrawonga within the in-pit void. This method differs from the currently approved rejects disposal strategy, which describes reject material being placed in an emplacement area. The proposed rejects disposal strategy provides for a safer, more stable work area while offering greater operational flexibility.

The proposed addition of Tarrawonga as a disposal site for fine reject presents an effective alternative to Rocglen as a reject disposal site and provides redundancy for the disposal of all Gunnedah CHPP produced rejects.

The number of heavy vehicle movements to Tarrawonga would remain unchanged. The reject material would be backloaded in coal trucks returning to Tarrawonga from the CHPP (i.e. in coal trucks that would have otherwise been returning to the mine site empty).

Whitehaven would continue to operate haulage in accordance with the Project Approval (PA 11\_0047). This includes haulage during the currently approved hours and along the currently approved Whitehaven ROM Coal Road Transport Route (Figure 1), minimisation and prompt management of potential spillage from coal haulage vehicles and the implementation of a Traffic Management Plan (TMP). The TMP includes management measures for haul truck operations in the vicinity of school busses on the Whitehaven ROM Coal Road Transport Route.

## **Environmental Assessment**

The proposed rejects disposal strategy would provide a degree of flexibility in the way that Whitehaven manages rejects generated at the Whitehaven CHPP.

Whitehaven is currently approved for the backloading and disposal of coarse rejects generated by the processing of Tarrawonga coal at the Whitehaven CHPP. Under the proposed change, rejects backloaded and transported to Tarrawonga would predominantly be blended (i.e. coarse and fine rejects), with the occasional disposal of a non-blended coarse or fine reject.



The proposed Tarrawonga rejects disposal strategy would be very similar to operations at Rocglen, and as such no adverse geochemical or environmental consequences are expected. As mentioned previously the reject material would be co-disposed with overburden from Tarrawonga within the in-pit void and ultimately covered with overburden.

The increase in reject material as a result of disposal of blended rejects would be minor, and would have no material impact on the waste emplacement volume at Tarrawonga over the life of the mine.

By way of example Tarrawonga is approved to produce up to 3Mtpa ROM coal, and with a life of mine strip ratio of around 10:1 equates to 30Mbcmpa of overburden. In any given year, the full 700,000t of reject equates to approximately 1.5% of total overburden movement, thereby resulting in no material change to the currently proposed final landform.

The trucks used to transport rejects back to Tarrawonga would comprise backloaded coal trucks returning to Tarrawonga from the CHPP (i.e. in coal trucks that would have otherwise been returning to the mine site empty), thus increasing the utilisation of the existing haulage fleet. The total number of heavy vehicle movements transporting coal and/or rejects and operating hours would therefore remain unchanged from what was assessed in MOD 1. Accordingly, there would be no incremental traffic related potential impacts resulting from the rejects proposal.

## Conclusion

Whitehaven is proposing to modify the reject disposal strategy at Tarrawonga. In addition to the currently approved disposal of coarse rejects at Tarrawonga, Whitehaven proposes to modify the existing rejects disposal strategy to allow for the disposal of dewatered fine rejects and blended coarse and fine reject material at Tarrawonga. Blended rejects (i.e. coarse and fine) produced at the Whitehaven CHPP would be backloaded and hauled to Tarrawonga for disposal using the existing haulage fleet.

I trust that the Environmental Assessment information contained in this letter, and the accompanying Section 75W modification application form, is sufficient to enable the Department of Planning & Environment (DP&E) to process the application.

In the meantime please do not hesitate to contact me on 0419 645 713 if you have any queries.

Yours sincerely,

**Mark Edmondson**  
General Manager – Technical Services

CC: David Kitto DP&E  
Steve O'Donoghue DP&E