

# ASSESSMENT REPORT

# BULGA OPEN CUT COAL MINE Rail Refuelling Facility Modification (DA 41-03-99 Mod 6)

# 1 BACKGROUND

Bulga Open Cut Coal Mine, managed by Bulga Coal Management Pty Ltd (Bulga Coal) a subsidiary of Xstrata Coal, is located in the Upper Hunter Valley, near Broke and approximately 12 km southwest of Singleton. The mine is part of the Bulga Coal Complex, which also incorporates the Beltana Underground Mine (DA 376-8-2003).

Approval for continued open cut mining at Bulga was granted on 23 December 1999, by the then Minister for Urban Affairs and Planning (DA 41-03-99). The development has since been modified five times to facilitate an office extension, relocation of wash down facilities, an increase in the capacity of the Coal Handling and Processing Plant (CHPP), and improvements to the noise monitoring and management conditions.

Under the existing consolidated consent (see **Appendix B**) Bulga Coal is allowed to extract up to 12.2 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from its open cut operations. The CHPP is approved to process up to 20 Mtpa of ROM coal and is currently processing 16 Mtpa of ROM coal from the whole Bulga Coal Complex. Product coal is transported from the CHPP by rail, currently at an average frequency of 8 to 10 trains per day.

# 2 PROPOSED MODIFICATION

Bulga Coal is seeking to modify its development consent for the Bulga Open Cut Coal Mine under section 75W of the *Environmental Planning and Assessment Act* 1979 (EP&A Act).

The proposed modification involves the construction and operation of a rail refuelling facility adjacent to the existing Bulga rail loop, as shown in **Figure 1** and described in detail in the Environmental Assessment for the modification (see **Appendix C**). The facility is required as part of Xstrata's proposed "XRail" network of trains. The XRail train network is planned to service all of Xstrata's Hunter Valley operations. A number of refuelling facilities (including at Bulga) are required to support this network. Table 1 provides a summary of the proposal.

Aspect	Description	
Modification Summary	<ul> <li>The construction and operation of a rail refueling facility (see Figures 1 and 2) including:</li> <li>installation of a 100 kL self-bunded diesel storage tank;</li> <li>oil storage;</li> <li>oily water separator;</li> <li>maintenance gantry;</li> <li>water storage;</li> <li>access road upgrades;</li> <li>ancillary mechanical and electrical equipment; and</li> <li>construction of a roof over the main facility.</li> </ul>	
Project Setting	The facility would occupy 2.2 hectares (ha) of previously disturbed land, owned by Bulga Coal and adjacent to the existing rail loop.	
Access road	Access would be via an existing track which would be upgraded and sealed to accommodate B- double vehicles and reduce dust.	

Table 1: Modification key components

Aspect	Description		
Construction Hours	7 am to 7 pm, on weekdays and weekends (if required) for a period of 16 weeks		
Site preparation and construction activities	<ul> <li>Site preparation and construction works would include:</li> <li>vegetation clearing;</li> <li>cut and fill of site area;</li> <li>installation of drainage and power infrastructure; and</li> <li>installation of facility components (see above).</li> </ul>		
Fuel Storage	Fuel would be stored in a 100 kL, 12 x 2.5 metre (m), self-bunded, above ground storage tank.		
Fuel Supply	Fuel supply would be via road with 50 kL capacity tankers. On average, 2 deliveries per week would occur.		
Maintenance gantry	The facility would include the construction of a 60 m long, 6 m high maintenance gantry for train windscreen cleaning and repair.		
Ancillary facilities	<ul> <li>Ancillary facilities forming part of the proposed refueling facility include:</li> <li><i>oil storage tank</i> – 5000 L capacity for storing train engine oil;</li> <li><i>oily water separator</i> – to treat any water or spills captured within spill pits and bunded areas. Treated water would then be transferred to the Environmental Control Dam for use in Bulga Coal's water management system;</li> <li><i>water tank</i> – proposed capacity is 10000 L. Water would be used for train maintenance and to supply the toilet and wash systems on board the trains; and</li> <li><i>lighting.</i></li> <li>These would be housed under a permanent roof structure.</li> </ul>		
Rehabilitation	The facility would be decommissioned and rehabilitated as part of the overall mine closure plan for the Bulga Open Cut mine.		
Employment	2 to 10 construction jobs, no additional full-time operational jobs.		
Capital Cost	\$2,000,000		

# **3 STATUTORY CONTEXT**

### Part 3A

Under Clause 8J(8)(b) of the *Environmental Planning and Assessment Regulation 2000*, a development consent granted under Part 4 of the EP&A Act is taken to be an approval under Part 3A for the purposes of modification if the development consent was granted by the Minister under *State Environmental Planning Policy No 34 – Major Employment* (SEPP 34). The development consent for the Bulga Open Cut Coal Mine was granted by the Minister under SEPP 34, and as a result section 75W of the EP&A Act is the appropriate statutory provision under which the Minister may determine the modification application.

### Approval Authority

The Minister for Urban Affairs and Planning was the consent authority for the original development application, and the Minister is therefore the consent authority for this modification application. However, under the former Minister's delegation of 25 January 2010, the Deputy Director-General, Development Assessment and Systems Performance may determine the application. The Minister's delegation dated 28 May 2011 confirmed that this delegation would continue to operate in circumstances where the local council has not objected to the proposal, less than 25 public submissions in the nature of objections had been received, and where there had been no reportable political donations, which is the present case. Consequently, the Deputy Director-General can determine the application.

#### Modification

The proposed modification involves the construction of some ancillary infrastructure on site to support existing mining operations. This infrastructure would be a minor component of the total infrastructure on site, and would have limited impact on the approved mining operations on site (see Section 5 below). As a consequence, the Department is satisfied that it should be treated as a modification of the original development consent under section 75W of the EP&A Act.



Figure 1: Proposed area for rail refuelling facility



**Figure 2:** Components of the proposed rail refuelling facility

# 4 CONSULTATION

Under section 75W of the EP&A Act, the Department is not required to exhibit the modification application or undertake consultation. However, the modification application was referred to relevant government agencies for comment.

Four agencies; the **Office of Environment & Heritage** (OEH, the former Department of Environment, Climate Change and Water, the **Division of Resources and Energy** (DRE, part of the Department of Industry & Investment, Regional Infrastructure & Services), **Singleton Shire Council** and the **Australian Rail Track Corporation** (ARTC) provided submissions on the proposal (see **Appendix D**). No agency objected to the proposal, however OEH provided recommended conditions of approval.

# 5 ASSESSMENT

The Department has assessed the merits of the proposal in detail, in accordance with the relevant requirements of the EP&A Act, and summarised the conclusions of this assessment in **Table 2**.

Issue         Consideration and Assessment         Recommendation           Aboriginal Heritage         • Two highly disturbed artefact scatters, containing no in situ artefacts, have been identified (see Figure 3). The proposed modification works are designed to avoid these         • Ensure works are conducted in accordance with the mine's Archaeology and Cultural Management Plan, and any necessary Aboriginal heritage impact					
<ul> <li>Aboriginal</li> <li>Two highly disturbed artefact scatters,</li> <li>Heritage</li> <li>Two highly disturbed artefacts, have been identified (see Figure 3). The proposed modification works are designed to avoid these</li> <li>Ensure works are conducted in accordance with the mine's Archaeology and Cultural Management Plan, and any necessary Aboriginal heritage impact</li> </ul>	Issue	Consideration and Assessment	Recommendation		
<ul> <li>sites and protective fencing has been erected.</li> <li>Impacts to these sites are unlikely but may occur through water runoff and erosion.</li> <li>Update existing conditions to include measures for dealing with the discovery of human remains and implementation of ar Aboriginal Cultural Heritage Program.</li> </ul>	Aboriginal Heritage	<ul> <li>Two highly disturbed artefact scatters, containing no <i>in situ</i> artefacts, have been identified (see Figure 3). The proposed modification works are designed to avoid these sites and protective fencing has been erected.</li> <li>Impacts to these sites are unlikely but may occur through water runoff and erosion.</li> </ul>	<ul> <li>Ensure works are conducted in accordance with the mine's Archaeology and Cultural Management Plan, and any necessary Aboriginal heritage impact permit is obtained.</li> <li>Update existing conditions to include measures for dealing with the discovery of human remains and implementation of an Aboriginal Cultural Heritage Program.</li> </ul>		

Table 2: Assessment of Key Issues

Issue	Consideration and Assessment	Recommendation
Biodiversity	<ul> <li>2.2 hectares of highly disturbed vegetation would be cleared.</li> <li>It is unlikely that any significant detrimental impact would occur as a result of the modification to any threatened species or population or their habitat, or to endangered ecological communities.</li> </ul>	<ul> <li>No change to existing conditions.</li> </ul>
Traffic and Transport	<ul> <li>Two diesel tankers per week would be required for fuel delivery.</li> <li>These additional movements are consistent with the existing traffic movements and any impact to the safety or performance of the road network would be negligible.</li> </ul>	<ul> <li>No change to existing conditions.</li> </ul>
Hydrocarbons and Waste	<ul> <li>Spill containment ponds at the refuelling points and tanker fuel loading point would drain into an oily water separator (OWS).</li> <li>Treated water from the OWS would be transferred to the site's dirty water management system to avoid the risk of discharge and possible pollution.</li> <li>Diesel fuel would be stored in a self-bunding above ground storage tank.</li> </ul>	<ul> <li>Ensure all above ground tanks containing material likely to cause environmental harm are bunded or have an alternative spill containment system.</li> <li>Ensure all bunds are impervious and sized to contain 110% of the largest container stored therein.</li> <li>Ensure all above ground tanks prevent ingress of rain or water.</li> <li>Ensure all tanks are clearly labelled as to contents.</li> </ul>
Noise	<ul> <li>No additional train stopping or train movements would occur.</li> <li>Increase in noise due to operations would therefore be negligible.</li> <li>Construction noise would not be audible, due to the scale of noise generated by existing operations and the distance to the nearest sensitive receiver (2 km).</li> </ul>	No changes to existing conditions.
Visual	<ul> <li>The proposed site is not visible from public roads or surrounding residences.</li> <li>Lighting impacts are considered unlikely at any public viewpoint in the area.</li> </ul>	No change to existing conditions.
Air Quality	<ul> <li>No additional dust generation is predicted during the operation of the proposed rail refuelling facility.</li> <li>Dust generated through equipment transport and cut and fill activities would be managed under the mine's existing Dust Management Plan.</li> <li>Water carts and prompt rehabilitation would be used to minimise dust impacts during construction.</li> </ul>	<ul> <li>No change to existing conditions.</li> </ul>
Surface and Ground Water	<ul> <li>No impacts to groundwater and minimal impacts to surface water are likely during construction and operation of the facility.</li> <li>Prior to construction, erosion and sediment control measures would be implemented in accordance with Landcom's Managing Urban Stormwater – Soils and Construction.</li> <li>The modification is within the coverage of the existing water management system and would be managed in accordance with the mine's Site Water Management Plan and Surface Water Management Program.</li> </ul>	No changes to existing conditions.
Rehabilitation	<ul> <li>Rehabilitation would be undertaken as part of the overall mine closure plan for the Bulga Coal Open Cut Mine.</li> </ul>	<ul> <li>No changes to existing conditions.</li> </ul>



Figure 3: Location of identified Aboriginal scatters

### 6 **RECOMMENDED CONDITIONS**

The Department has drafted recommended conditions for the modification to address the recommendations in Table 2 above (see **Appendix A**). Bulga Coal has reviewed and accepted these conditions, and also provided a short statement of commitments.

### 7 CONCLUSION

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

Based on this assessment, the Department considers that the proposed modification represents a change that is generally consistent with and ancillary to the approved development. The assessment has found that, given the disturbed state of the proposed site, the rail refuelling facility and associated infrastructure would not generate any adverse environmental impacts beyond those associated with the existing approved Bulga Coal Open Cut Coal Mine.

Potential alternatives to the proposed refuelling facility at the mine include mobile and offsite refuelling facilities. However as the proposed location is adjacent to the existing rail loop, optimum efficiency is achieved by allowing refuelling to take place during coal loading operations, and through the utilisation of existing rail track, negating the need for additional track construction.

The Department is satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.

### 8 **RECOMMENDATION**

It is RECOMMENDED that the Deputy Director-General, as delegate of the Minister:

- consider the findings and recommendations of this report;
- **determine** that the proposed modification falls within the scope of section 75W of the EP&A Act;
- **approve** the application under section 75W, subject to conditions; and
- sign the notice of modification in Appendix A.

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