



ASSESSMENT REPORT

Section 96(1A) Modification - Wambo Coal Mine Temporary Creek Diversion

1. BACKGROUND

Wambo Coal Pty Limited (the Applicant) owns and operates the Wambo Coal Mine, near Singleton in the Upper Hunter Valley (see Figure 1).

The mine originally operated under a development consent issued by Singleton Council in 1991.

In February 2004, the Minister approved a development application (DA 305-7-2003) to increase the rate of production at the mine from 3.0 to 14.7 million tonnes of run-of-mine coal a year through a combination of open cut and underground mining operations.

The mine at full capacity would have a capital investment of \$280 million and employ up to 370 people.

As part of the approved mine plan, the Applicant is required to divert North Wambo Creek around the open cut workings. However, the time required to construct, stabilise and commission the full length of the North Wambo Creek Diversion (permanent diversion) in accordance with the requirements of the Minister's consent would interrupt the progress of open cut development at the Wambo Coal Mine.

To avoid any interruptions to open cut mining, and ensure that there is sufficient time to construct the permanent diversion, the Applicant is proposing to construct a temporary diversion of the creek to allow open cut mining to proceed uninterrupted for the next 2 years.



Figure 1 – Regional Context

2. PROPOSED MODIFICATION

On 3 August 2006, the Applicant lodged an application and an associated Statement of Environmental Effects (SEE) with the Department to modify the development consent for the Wambo Coal Mine (DA 305-7-2003) under section 96(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposed modification involves the construction and operation of a temporary creek diversion (temporary bypass) on a 2 kilometre section of North Wambo Creek. The temporary bypass would consist of a rock lined trapezoidal channel (see Figure 2). A block embankment would be constructed across the existing creek alignment to direct flows into the temporary bypass. A block embankment would also be constructed across the existing creek alignment immediately upstream of the temporary bypass outlet point to minimise the potential for backflow to the open cut. Both block embankments would include a low permeability foundation (e.g. compacted clay material) as a barrier to flows in shallow alluvium. An outlet structure (e.g. stilling basin) would also be constructed to absorb flow energy and minimise erosion potential.

The proposed alignment of the temporary bypass would be within the extent of the approved open cut workings (see Figure 3). The temporary bypass would have a design life of approximately 2 years and would be decommissioned following the commissioning of the permanent diversion.

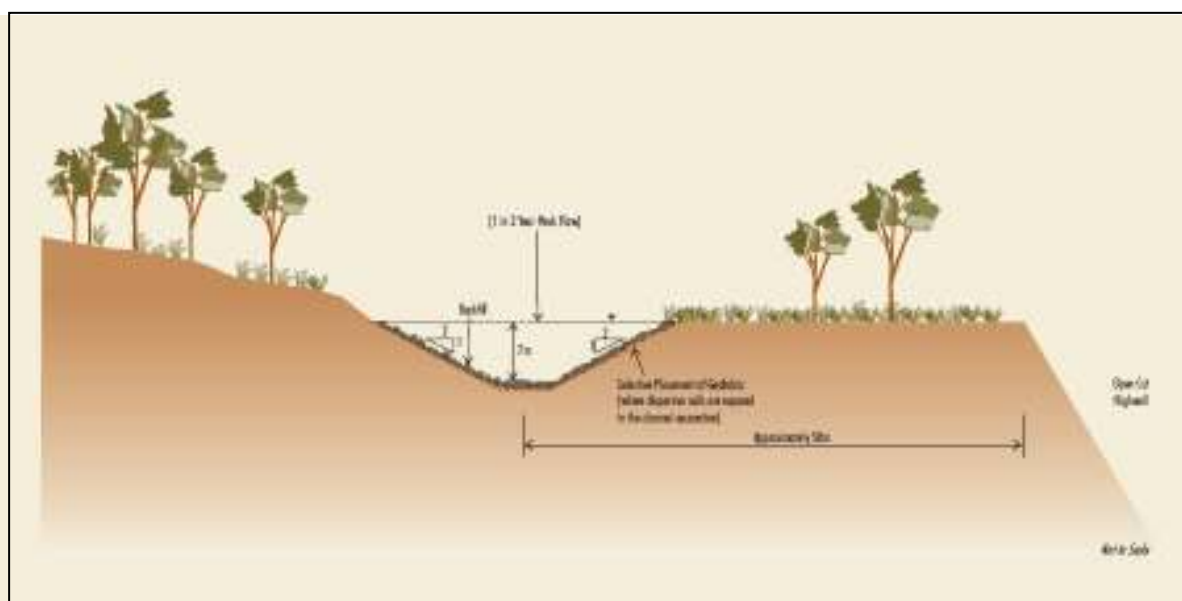


Figure 2 – Conceptual Temporary Diversion Channel Typical Section

3. STATUTORY CONTEXT

The Minister was the consent authority for the original development application, and is consequently the consent authority for this application.

Under section 96(1A) of the EP&A Act, a consent authority may modify a development consent if it is satisfied that:

- a) *the proposed modification is of minimal environmental impact, and*
- b) *the development to which the consent as modified relates is substantially the same development for which consent was originally granted and before that consent as originally granted was modified (if at all) under this section.*

The Department has assessed the potential impacts of the proposal (see Section 5) and is satisfied that the proposed modification would be of minimal environmental impact, and that the development (as modified) would remain substantially the same development for which consent was originally granted.

On 5 April 2006, the Minister delegated his powers and functions as a consent authority to modify development consents under section 96(1A) of the EP&A Act to the Executive Director, Sustainable Development Assessments. Consequently, the Executive Director may determine the application under delegated authority.

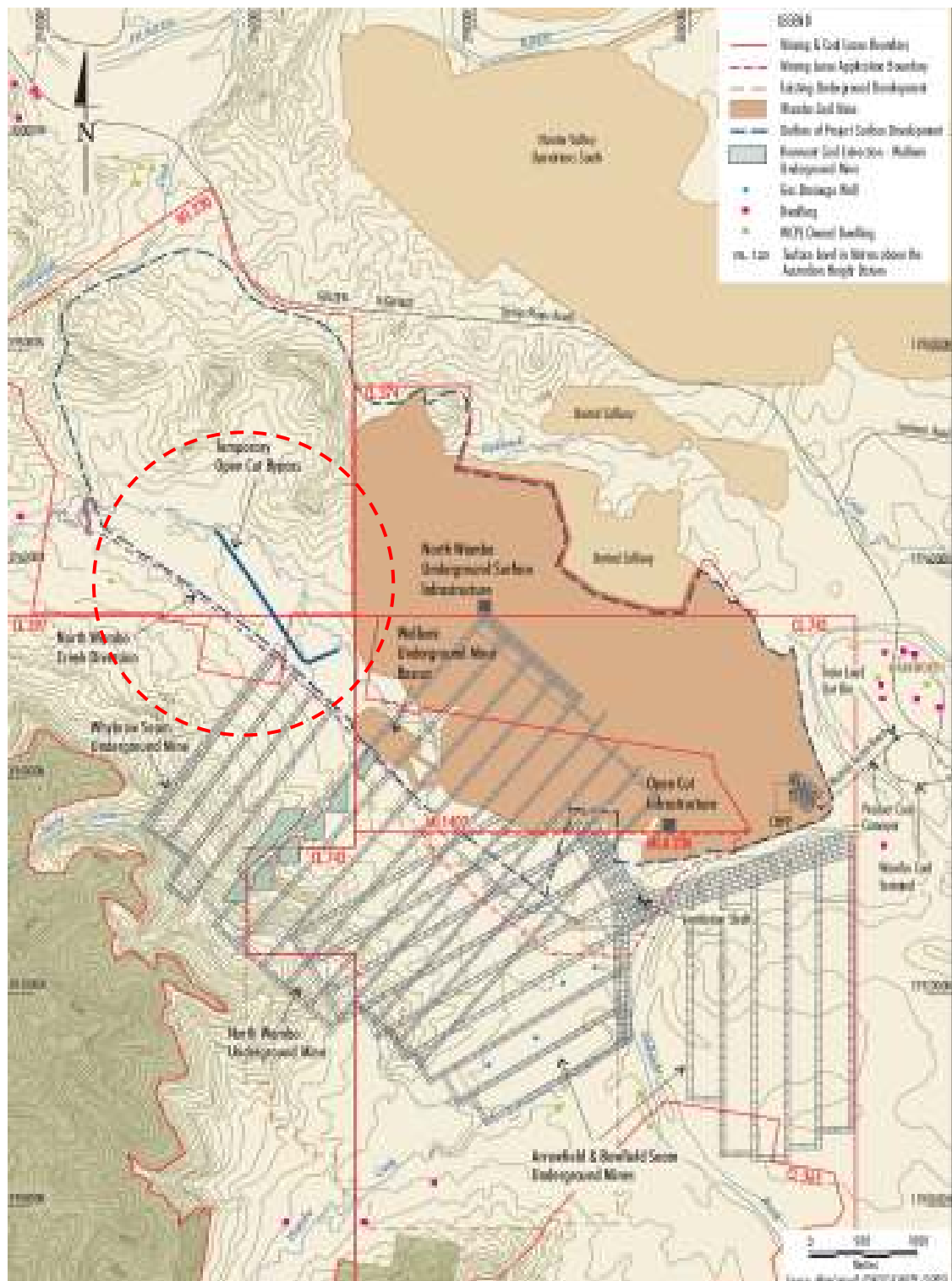


Figure 3 – Location of Temporary Creek Diversion

4. CONSULTATION

While the Department is not required to exhibit applications under section 96(1A) of the EP&A Act, it nevertheless sought comments from the:

- Department of Natural Resources (DNR);
- Department of Primary Industries – Fisheries (DPI - Fisheries);
- Department of Primary Industries – Minerals (DPI - Minerals); and
- Department of Environment and Conservation (DEC).

None of the government agencies objected to the proposed temporary bypass provided that the design and construction of the permanent diversion commenced at the same time. DNR also required the Applicant to obtain relevant licences under the *Water Act 1912* prior to construction commencing.

5. CONSIDERATION

The Department has assessed the application and the submissions on the proposal in accordance with the requirements in section 79C of the EP&A Act. The key issues assessed by the Department are discussed below.

Issue	Consideration	Impact
Surface Water	The construction of the temporary bypass has the potential to result in short term impacts on water quality in North Wambo Creek. To control and minimise these potential impacts the Applicant has included a range of erosion and sediment control measures into the design of the bypass, and would not commission the bypass until construction works had been completed. The temporary bypass has also been designed with low permeability liners to minimise any loss of surface water flows from the bypass into the open cut pit. With the implementation of the proposed mitigation measures and scheduling of the construction works, the Department is satisfied that the bypass can be constructed and operated in a manner which would minimal impact on water quality and flows in North Wambo Creek. Notwithstanding, the Department has incorporated a condition into the consent that requires the Applicant to design, construct and maintain the temporary bypass to the satisfaction of DPI and DNR.	Negligible
Groundwater	The temporary bypass would include low permeability embankments at the upstream and downstream ends of the bypass. This would minimise any leakage of groundwater into the bypass from the alluvial areas of the undiverted sections of North Wambo Creek. Any inflows of groundwater from the North Wambo Creek alluvials into the open cut during the operational life of the bypass would be managed in accordance with the approved Groundwater Monitoring Program and the groundwater management measures in the 2003 Environmental Impact Statement (EIS) for the mine.	Negligible

Issue	Consideration	Impact
	The Department is satisfied that the proposed design of the temporary bypass would ensure that there would be no significant impacts on groundwater resources. The Department is also satisfied that no additional mitigation or management measures are required over and above those required under the existing consent.	
Aquatic ecosystems	The temporary bypass would be designed to provide a stable low flow path around the perimeter of the open cut workings for a period of 2 years. The bypass channel would be rock armoured and reinforced with geotextile material to minimise erosion and downstream water quality impacts. It is expected that the channel would have limited ecological value for aquatic organisms, although the areas of the creek that remained undisturbed would continue to provide some suitable aquatic habitat. The Department is satisfied with the measures proposed by the Applicant to minimise impacts on water quality and aquatic ecosystems, and is satisfied that the proposed bypass would not increase the impacts of the approved development on aquatic ecosystems.	Negligible

6. CONCLUSION AND SECTION 79C CONSIDERATION

The Department has assessed the proposal against the matters under section 79C of the EP&A Act, and is satisfied that:

- the proposal would not materially change the environmental impacts of the development as originally approved as the impacts associated with the diversion of North Wambo Creek were considered and approved under the 2004 Ministerial consent;
- the development as modified would remain consistent with the objectives and requirements of relevant planning instruments;
- the site is suitable for the proposed modification as it is within the existing approved mine footprint; and
- the proposed modification is in the public interest as it would:
 - allow open cut operations at the mine over the next 2 years to continue uninterrupted;
 - provide adequate time to design, construct, stabilise and commission the permanent diversion in a manner that would achieve the hydrological and ecological functionality required under the Minister's consent; and
 - facilitate the social and economic benefits associated with the ongoing operation of the Wambo Coal Mine.

Consequently, the Department is satisfied that the proposed modification should be approved, subject to conditions.

7. RECOMMENDATION

It is RECOMMENDED that the Executive Director exercise the powers and functions delegated to him in the Instrument of Delegation from Minister Sartor, dated 5 April 2006, and:

- consider this report;
- determine that the development consent, as modified, would relate to substantially the same development to which consent was originally granted;

- approve the proposed modification under section 96(1A) of the EP&A Act, subject to conditions set out in the attached notice of modification; and
- sign the attached notice of modification (Tag A).

Mike Young
Manager
Mining & Extractive Industries

David Kitto
Director
Major Development Assessments

Chris Wilson
Executive Director
Sustainable Development Assessments