

Statement of Environmental Effects

in support of a

**96(1A) Modification to Development Consent DA 89/2886
Integra Coal Operations Pty Ltd
(Camberwell Coal Pty Limited)
Singleton NSW**

**RELOCATION OF EXPLOSIVES MAGAZINE COMPOUND AND
RELOAD FACILITIES**

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1.0 Summary

This Statement of Environmental Effects (SEE) has been prepared to support an application by Integra Coal Operations Pty Ltd (ICO) pursuant to Section 96(1A) of the Environmental Planning and Assessment Act to modify development consent DA 86/2889. DA 86/2889 was determined by the Minister for Planning on 19 March 1990 and granted approval for the construction and operation of an open cut coal mine (and associated facilities) known as the Camberwell Coal Project.

The modification is sought solely to enable the relocation of the existing explosives magazine and associated facilities within Camberwell's Coal Lease, CL 357.

2.0 Introduction

2.1 The Applicant

This application is made by ICO. ICO is the management company responsible for all operations at what were previously known as the Camberwell Coal Mine and the Glennies Creek Colliery (now known as the Integra Open Cut and Integra Underground respectively). ICO is the owner of Camberwell Coal Pty Limited and Glennies Creek Coal Management Pty Ltd and has operational use of the land to which this modification applies under the Integra Joint Venture Agreement. The real property description of surface lands within the development application area is provided in **Appendix 1**.

The Integra operations are located some 10km north-west of Singleton, NSW (**Figure 1**). Mining operations commenced in February 1991 and have been undertaken continuously since that time.

ICO is owned 61.2% by Vale S.A., through subsidiary companies Vale Australia (GC) Pty Ltd and Maitland Main Collieries Pty Ltd, with the minor Joint Venture participants being:

- Toyota Tsusho Mining (Australia) Pty Ltd (28%);
- NS Glennies Creek Pty Limited (3.6%);
- JS Glennies Creek Pty Ltd (1.8%);
- JFE Steel Pty Ltd (1.8%); and
- POS-GC Pty Ltd. (3.6%)

Vale is a global diversified mining company headquartered in Brazil with more than 100,000 employees.

Vale currently owns or part-owns four operating coal mines and holds an extensive portfolio of highly prospective coal and metalliferous tenements in Queensland, Northern Territory and Western Australia.

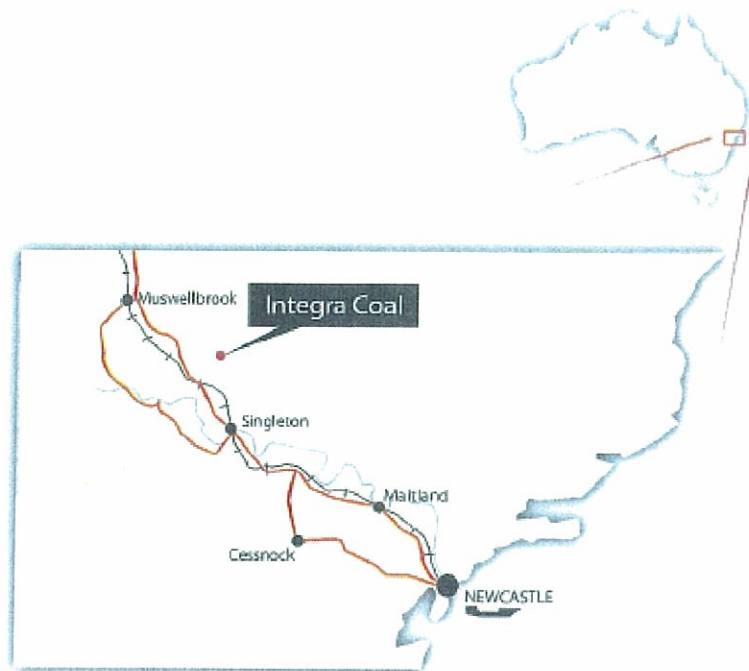


Figure 1: Location Plan

2.2 Rational of the Proposal

The existing explosive magazine and reload facility, which comprises prill and emulsion silos, sea containers, a demountable building and associated concrete slabs, has been subject to flooding on two occasions since 2007 and, on each, has resulted in a loss of explosives products, caused delays to the mining operation due to the inability to load explosives, and damage to the explosives supplier's equipment. Both ICO and the explosives supplier are unwilling to risk a further such occurrence, particularly in light of the extended mine life which has arisen as a consequence of the recent approval of the North (Glennies Creek) Open Cut and the likely approval of the westerly extension of the existing South Pit open cut.

2.3 Statutory Planning Approval Sought

From correspondence between Mr Bob Corbett and Belinda Parker of the Department of Planning (DoP) (email 8/3/2010), the proposed modification to Camberwell Coal's 1990 development consent can be progressed by a section 96(1A) application to modify DA86/2889.

2.4 Other Approvals

Camberwell Coal Pty Ltd or ICO hold all approvals, licences, leases and permits required for the existing operations at the Integra Open Cut. No additional approvals, licences, leases or permits will be required for this minor modification.

2.5 Changes to Consent Conditions

Although reference to this document may be required to be added to the preface to Schedule 2 of the existing consolidated development consent (see Appendix 1), no other changes are considered warranted.

It is noteworthy, however, that the Integra Open Cut Project application (MP 08_0102) which is currently being assessed by the Department of Planning, includes the replacement of DA 86/2889 and the Glennies Creek Open Cut approval (PA 06_0073) with a single consolidated project approval. It is envisaged that all existing conditions within DA 86/2889 will be reassessed as part of that process for their applicability and conformance with contemporary approvals.

2.6 Consultation with Government Agencies

Integra Coal has been in contact with the Department of Planning through telephone and email correspondence between Mr Bob Corbett, Senior Environmental Coordinator (Integra Coal) and Ms Belinda Parker and Mr Nicholas Hall (Department of Planning) between the mid December 2009 and the 10 March 2010.

The relocation of the explosives compound had also previously been discussed with the Department of Primary Industries (Mineral Resources) after the preparation of the John Hannan Surface Water Management Plan (2001) highlighted the potential risk for the flooding of the magazine area in exceptional storm events. Mineral Resources recognized that the flooding of the compound was a serious risk to mining operations and the relocation of the facility should be investigated.

2.7 Planning Context

The subject land is not listed in the Singleton local Environmental Plan, (LEP) 1996 as being or containing any heritage item, nor is it in a heritage conservation area. No other local development control plans or additional s.94 contributions are applicable.

There are no practical applications to any State Environmental Planning Policies not covered previously in applications by Camberwell Coal or ICO over the land in question.

3.0 Existing Operation

3.1 Current Approvals

Integra is the owner of Camberwell Coal Pty Ltd, holder of DA 86/2889. The Minister for Local Government and the Minister for Planning determined the application for development consent on the 19 March 1990. There have been nine subsequent approved modifications to DA 86/2889 which are listed in the consolidated Development Consent provided in **Appendix 2**. Six of these modifications have occurred post 2000, with the majority of these relating to or associated with the integration/inter-relationship of operations at the Open Cut and Underground, both before and subsequent to the formation of ICO.

3.2 Existing Explosives Magazine and Storage area

An existing explosives magazine and reloading facility has been in operation since soon after the commencement of mining on the Integra Open Cut (Camberwell) site. Though not specifically identified in the original 1989 EIS, its exclusion from that documentation is not inconsistent with the general lack of detail provided in such documents at that time. Though unable to confirm it to be the case, it is presumed that the subsequent installation of the facility was considered to be in accordance with the approval for “construction and operation of a surface coal mine, associated transport and coal loading facilities, including rail spur line.” This being the case, and there being no requirement at the time of subsequent modifications to DA86/2889 to amend or relocate the facility, it was not specifically identified in any subsequent modification application documents.

Integra Coal Operations (ICO) operates the magazine and explosives reloading facility in a low lying area north-west and immediately adjacent to its Open Cut ROM pad, and maintenance and equipment hardstand.

The facility, which comprises prill and emulsion silos, sea containers, a demountable building and associated concrete slabs, has been subject to flooding on two occasions since 2007 and, on each, has resulted in a loss of explosives products, caused delays to the mining operation due to the inability to load explosives, and damage to the explosives supplier’s equipment. A site water management review completed in 2001 by Mr John Hannan identified that there was a considerable risk of flooding to the area in extreme rainfall events.

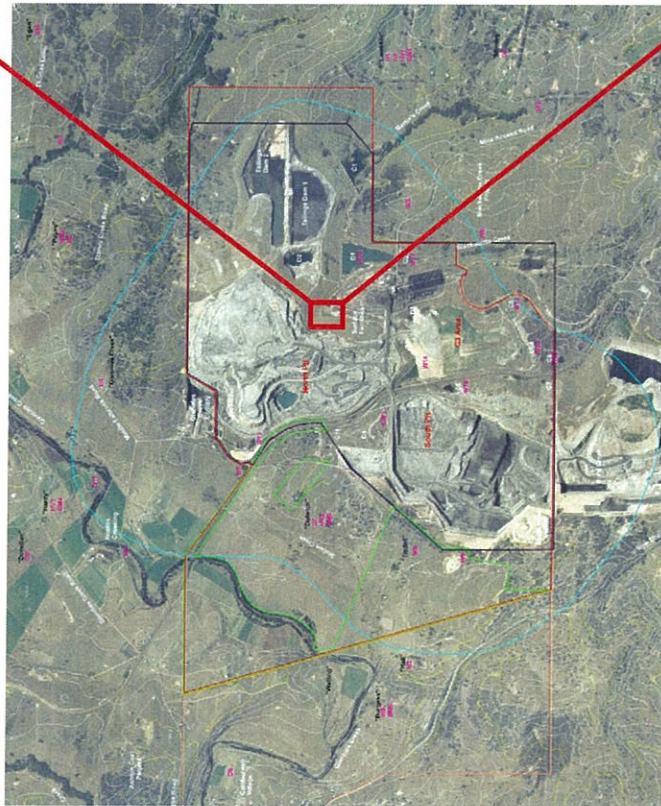
With the commencement of a new contract with Orica Pty Limited for the supply of explosives, reload facilities and technical support, an opportunity now exists to redevelop the facilities in an adjacent but higher elevation.

4.0 The Proposal

The proposal involves the relocation of the existing explosives magazine and reload facility to a flood-proof location approximately 450m north of the existing facility (**Figure 2**). The new location lies adjacent to the North Open Cut haul road, on the south south-westerly facing slopes of a former overburden emplacement. As with the existing facility, the principal items to be installed on the 120m x 65m (approx) level pad will include a 55t Ammonium Nitrate (AN) silo; a 80t AN emulsion silo; a 6m sea container for stores, a demountable office building and a wash down/ service bay. Three 6m sea containers which will function as explosives magazines will be positioned adjacent to the main pad at a separation distance specified under AS 2187.2 - Storage of Explosives Both the main pad and magazine areas will be fenced as required by AS 2187.2. The dangerous goods licence for the existing facility will continue to apply.

Construction of the level pad area (which will be achieved through the selective placement of overburden material sourced from the North Open Cut), foundation installation and the erection or construction of the various facility components will be achieved over a period of approximately three months using equipment which is, or is of a form, routinely engaged on site for day to day operations. As such, there will be no change in employment levels.

An indicative facility layout is provided in **Figure 3**.



INTEGRA COAL

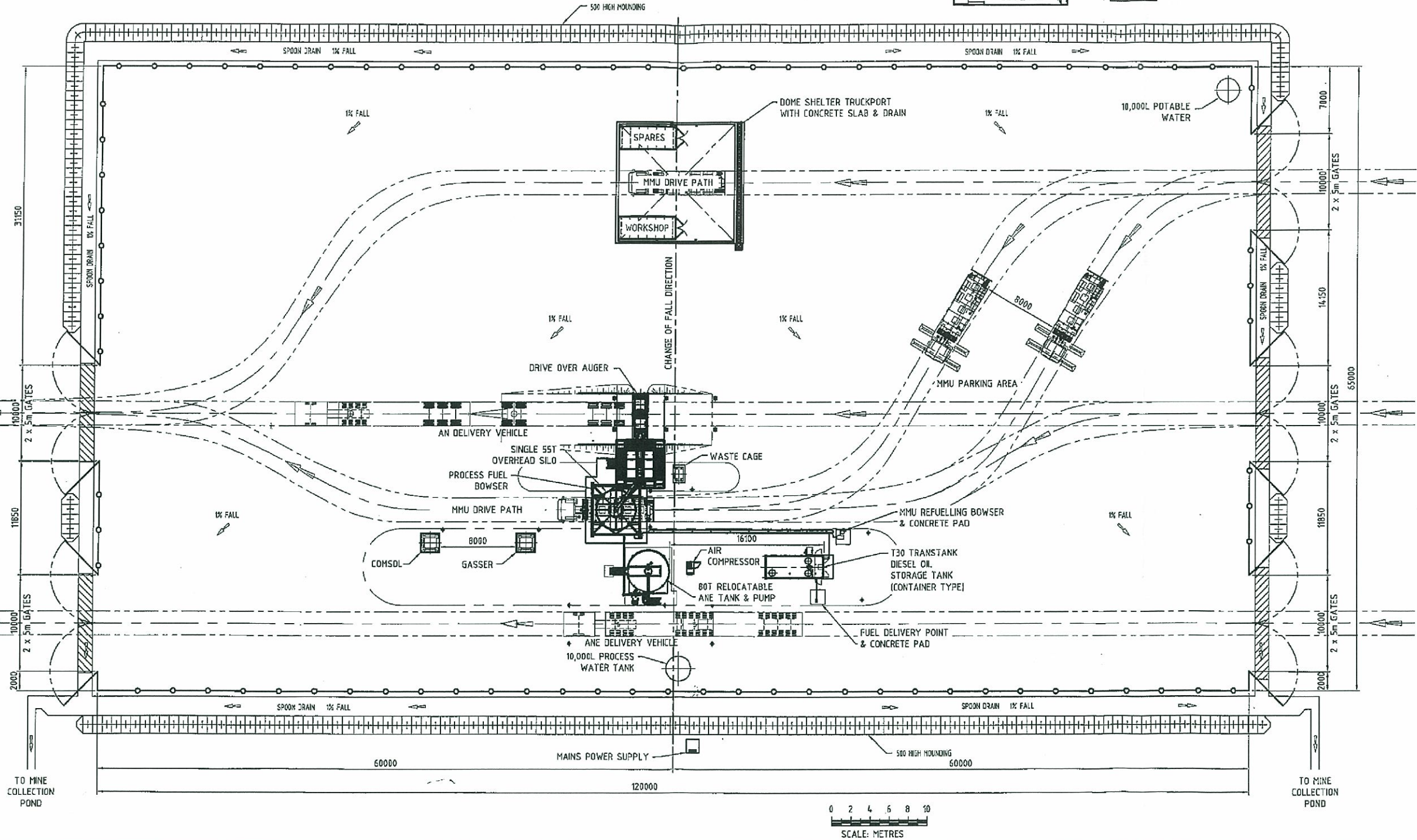
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PROPOSED RELOAD AREA



Figure 2: Proposed Explosives Storage and Reload Facility Location Plan

Figure 3: Proposed Explosives Storage and Reload Facility Indicative Layout



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5.0 Environmental Analysis of the Proposal

5.1 Topography

The new explosives magazine and reload facility will be constructed adjacent to the North Open Cut Haul Road, approximately 450m north of the existing explosives magazine and reload facility, on a level pad to be constructed on the south south-westerly facing slopes of a former overburden emplacement. Pad elevation will approximate 107m AHD. The elevation of the pad was chosen to avoid future flooding, provide a level exit from the existing northern haul road and marry the pad into the existing topography.

5.2 Erosion and Sediment Control

The new explosives magazine is to be located in an existing dirty water catchment area and will utilise the existing site erosion and sedimentation controls. No additional controls will be required for the facility.

5.3 Hydrology

5.3.1 Surface Water/ Water Balance

All surface runoff from the new facility will report to the existing dirty water system, eventually being transferred to dirty water Dam D1, for use in dust suppression around the mine site or in the coal washing process

No changes will occur to the water balance as there will be no significant increase or decrease in site water requirements from the project nor any significant change in the catchment areas reporting to the existing clean and dirty water management systems. Existing site water monitoring will continue to gauge impacts under existing controls.

5.3.2 Groundwater

The proposed modification will have no impact on groundwater as the mine plan and mining extraction process will not be changed.

5.4 Air Quality

The modification will have an insignificant air quality impact. Dust emissions during the construction and facility relocation activities will be restricted through the application of water while an aggregate or similar surface will be applied to the compound itself. Additionally there will be no changes to the number of vehicles on site, the number of trips required to transport the explosives or total vehicle kilometers travelled (VKT) by explosives transport vehicles.

The existing facility and the batter slopes to the new pad will be rehabilitated to pasture after construction of the new facility resulting in no significant change to the area of disturbed ground.

The existing air quality monitoring network used to assess dust emissions from the Integra operations and including deposited dust gauges, TSP and PM₁₀ high volume air samplers and a TEOM PM₁₀ would remain unchanged and the existing air quality criteria applicable to the site would continue to apply.

5.5 Noise

As noted previously, construction of the required pad, foundations and access together with the installation of the structural elements will use equipment which is routinely used on site and as such would not result in any discernible change to the noise emissions or existing noise climate

Operation of the facility would similarly have no measurable impact on noise as there are no changes to the number of vehicles on site or the number of trips required to transport the explosives.

Existing management techniques and monitoring programs designed verify compliance with the noise limits specified in DA 86/2889 will continue

5.6 Visual Aspects and Night Lighting

The proposed facility explosives compound will be located on a rehabilitated overburden emplacement at a similar elevation to the reject storage bin and ROM coal stockpile area, approximately 15m above that of the existing facility, with the tallest components being similar in height to structures around the mine facilities area such as the coal bin, reject bin and fuel tanks. Like these existing structures, some components of the proposed facility will be visible over approximately 200m length of Bridgman Road from a distance of in excess of 2km and then, primarily as an obstructed view through the roadside and intervening vegetation. To minimize and potential visual impact the elevated components such as the silos will be painted in a colour that blends with the rehabilitated overburden emplacement in the background and existing infrastructure. Any night (security) lighting will be directed away from the North Open Cut haul road and Bridgman Road.

5.7 Flora and Fauna

The proposed explosives compound is to be located in a previously disturbed area of the mine that has been rehabilitated with exotic pasture species. No threatened flora or fauna are known to be present or utilize the new explosive compound area.

5.8 Waste Management

The existing site waste management handling and disposal system will continue to be utilized and no changes are required by this proposal.

5.9 Heritage

The proposed new explosives compound is to be located on a previously disturbed overburden emplacement and is totally within the Camberwell Coal mine lease. The lease area was previously surveyed for archeological sites as part of the original approval process and consents to destroy obtained for all sites in the areas that would be impacted over the life of the mine, e.g. overburden emplacements and mine areas. Consequently, no sites remain at the proposed new explosives compound site and the proposed activities will not impact on aboriginal heritage.

6.0 Environmental Management

6.1 Dust

The combination of existing and proposed dust control measures to be implemented during the construction and operation of the relocated facility, including the application of water to trafficked surfaces and an aggregate surface to the compound have been assessed to be adequate and appropriate for the control of dust.

6.2 Water

Water management at Integra Coal Open Cut will not be significantly impacted by the proposal. Existing water segregation and controls will continue to apply and no additional sedimentation controls are required. Water from the area will report to the dirty water system. Clean water diversion banks from the rehabilitated area around the facility will not be affected.

6.3 Noise

No additional noise modelling has been conducted nor was considered warranted as the minimal change in site operations is not expected to result in any measurable change to the existing noise emissions or any associated exceedance of the current noise goals as specified in DA 86/2889..

6.4 Flora and Fauna

No additional threatened flora or fauna controls are considered necessary.

6.5 Archaeology

No additional archaeology surveys or controls re considered necessary.

7.0 Socio-Economic Management

The total number of employees at Integra Open Cut Operations will not be affected by this proposal. However, due to the extended life of the mine as a consequence of the North Open Cut approval, the expected approval of the Integra Open Cut project application and the new contractual arrangement with Orica, the previously otherwise unjustifiable cost of relocating the facilities is now economically feasible. The new location will eliminate the risk of future flooding, lead to reduced waste and remove the potential downtime to mining operations from future rainfall events, all of which will have a positive effect on the economics of the mining operation and hence future employment security for the workforce.

Additional benefits will also be derived from the reduced risk to the environment which would arise as a consequence of any future flooding events at the existing explosives storage area.

8.0 Alternatives

The principle alternative to the current proposal, i.e to continue to utilize the explosives magazine and reload facilities in its existing location, is not considered viable in the longer term as the area has been inundated by flood water in two separate storm events since 2007 and, on both occasions, has disrupted the site's mining operations, resulted in significant expense and minor indirect environmental impacts.

No alternative site for a relocated facility has been identified which would not necessitate an increase in VKT or delivery vehicles travelling through operational areas of the mine, or result in a reduction in impacts from those associated with the nominated location.

9.0 Relevant matters under section 79C of the EP&A Act CHECK REFERENCES

Section 76C matters for consideration	Comment
1 (a) the provisions of:	
(i) Any environmental planning instrument, and	Refer Section 2.3 and 3.1
(ii) Any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority; and	None applicable
(iii) Any development control plan, and;	Refer Section 2.7
(iv) The regulations (to the extent that they prescribe matters for the purposes of this paragraph), That apply to the land to which the development application relates,	SoEE formulated to conform to the Act and regulations
(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts on the locality,	Refer Sections 5 and 7
(c) The suitability of the site for development,	The site is an approved open cut coal mine on suitably zoned land. The proposed modification relates to existing approved operations on the site.
(d) Any submission made in accordance with this Act or the regulations,	DoP and the Minister will review any submissions.
(e) The public interest.	Refer Section 7

10.0 Conclusion

As the proposed modification to DA86/2289 relates to an activity at and within an existing operating open cut coal mine and the activity is primarily the same as currently undertaken, any environmental impacts are minimal and manageable. The approval of the proposal will provide security and certainty of explosives storage and handling at the site, prevent disruption to operations and potentially reduce environmental impacts from flooding risk at the existing explosives magazine and reload facilities.