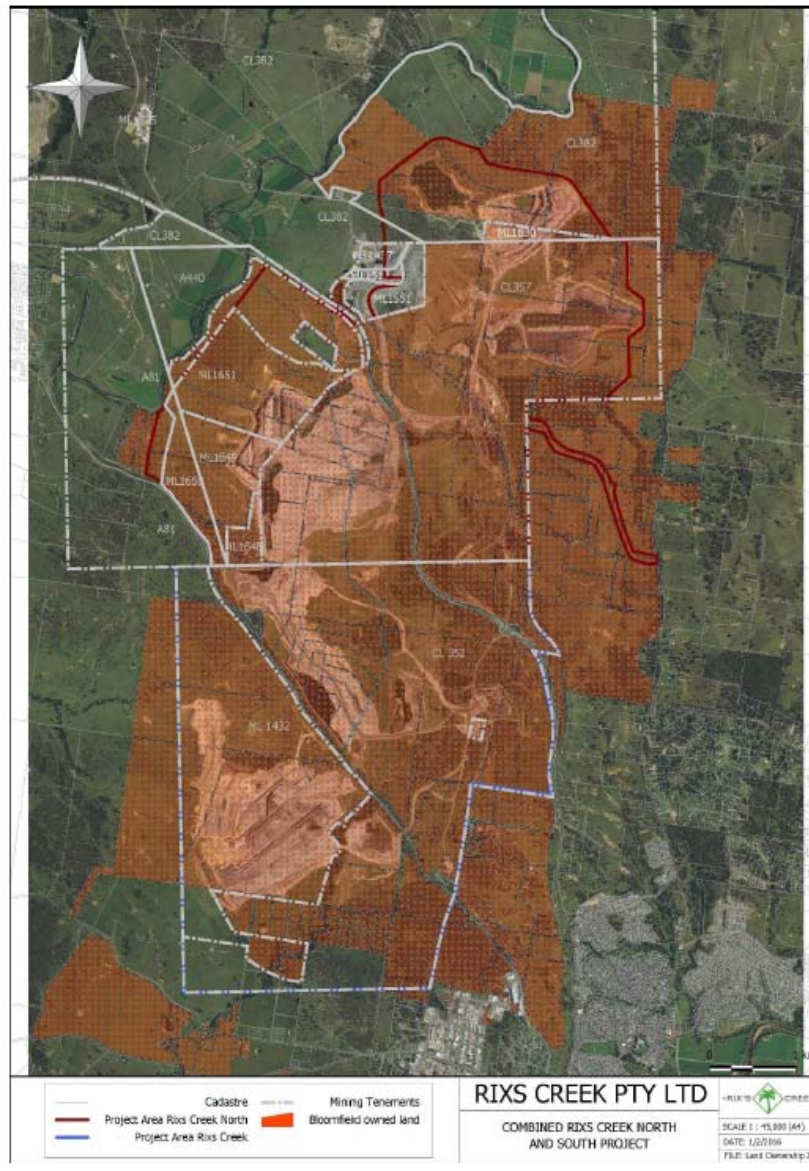


## Rix's Creek Coal Mine Stockpile Modification (DA 49/94 MOD 8)

### Environmental Assessment Report Section 75W of the *Environmental Planning and Assessment Act 1979*

#### 1. BACKGROUND

Bloomfield Collieries Pty Limited (Bloomfield) owns and operates the Rix's Creek Coal Mine (Rix's Creek), an open cut mine located 5 kilometres northwest of Singleton in the Hunter Valley. In 2015 Bloomfield acquired the Integra Open Cut Project, now known as Rix's Creek North, an open cut coal mine located immediately north of Rix's Creek (see **Figure 1**). Both Rix's Creek and Rix's Creek North are located within the Singleton local government area.



**Figure 1:** Location of Rix's Creek and Rix's Creek North

Rix's Creek currently operates under DA 49/94, which was approved by the then Minister for Urban Affairs and Planning under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in 1995. The Integra Open Cut Project (now Rix's Creek North) was approved under Part 3A of the EP&A Act on 26 November 2010 (MP 08\_0102).

DA 49/94, as modified, allows Bloomfield to move up to 16.1 million bank cubic metres of material per year until June 2019, which, at current strip ratios, leads to the production of 2.8 million tonnes per annum (Mtpa) of run of mine (ROM) coal. Under MP 08\_0102, Bloomfield is permitted to extract up to 1.5 Mtpa of ROM coal from the northern mining area, and 4.5 Mtpa from the western mining area, until the end of December 2035. Both Rix's Creek and Rix's Creek North have their own Coal Handling and Preparation Plant (CHPP) facilities.

Since its acquisition of Rix's Creek North, Bloomfield has attempted to combine operations between the two sites to form a single integrated complex. In February 2016, DA 49/94 and MP 08\_0102 were modified to allow the transportation of ROM coal from Rix's Creek North to the Rix's Creek CHPP, and from Rix's Creek to the Rix's Creek North CHPP, for processing and dispatch.

Between August 2014 and June 2016, Rix's Creek North was placed under care and maintenance. As part of the recommencement of mining operations, the existing CHPP at Rix's Creek North is currently undergoing refurbishment. This refurbishment will not be completed until mid-2017. In the interim period, all ROM coal from Rix's Creek North will be transported to the Rix's Creek CHPP for processing.

## 2. PROPOSED MODIFICATION

On 15 November 2016, Bloomfield lodged a modification under section 75W of the EP&A Act. The modification involves the establishment of two ROM coal stockpile pads near the Rix's Creek CHPP (see **Figure 2**).

As the Rix's Creek CHPP is currently receiving higher than usual volumes of ROM coal, Bloomfield submits that two additional stockpiling areas are required to ease congestion at the site. This congestion is exacerbated by the need to store each of 38 different bands of coal separately for quality control purposes. The two proposed stockpiling areas would be used to store small quantities of ROM coal of varying quality, which would otherwise increase congestion within the existing stockpiling area at the CHPP. Following the recommissioning of the Rix's Creek North CHPP, the pads would be retained for use on an as-needed basis, during periods of high congestion. This would include, for example, maintenance closures at the CHPP.

The pads would be constructed from overburden material and have a combined storage capacity of 46,812 tonnes. The first of the proposed pads (Pad 1) would be located adjacent to the 'low road' marked in green in **Figure 2**. This stockpiling area would be established on a section of overburden emplacement area (OEA) adjacent to the Old North Pit (see **Figure 3**). As this area has previously been utilised for stockpiling purposes, it requires no additional disturbance. The second proposed pad (Pad 2) is located adjacent to the 'high road' delineated in blue in **Figure 2**. The construction of Pad 2 would require the disturbance of approximately 0.52 hectares (ha) of rehabilitated land, which was previously used as an OEA (see **Figure 3**).

## 3. STATUTORY CONTEXT

### 3.1 Section 75W

DA 49/94 was granted under Part 4 of the EP&A Act. In accordance with clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* and the transitional arrangements under Schedule 6A of the EP&A Act, the modification must be determined under the former section 75W of the EP&A Act.

The proposal involves a relatively minor modification which would not materially change the nature or scale of approved operations. Consequently, the Department is satisfied that the proposed modification is within the scope of section 75W, and may be determined accordingly.

### 3.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, the Director, Resource Assessments may determine the application under the Minister's delegation of 16 February 2015, as

there were no public objections, Singleton Council did not object to the proposal, and no political donations have been declared.

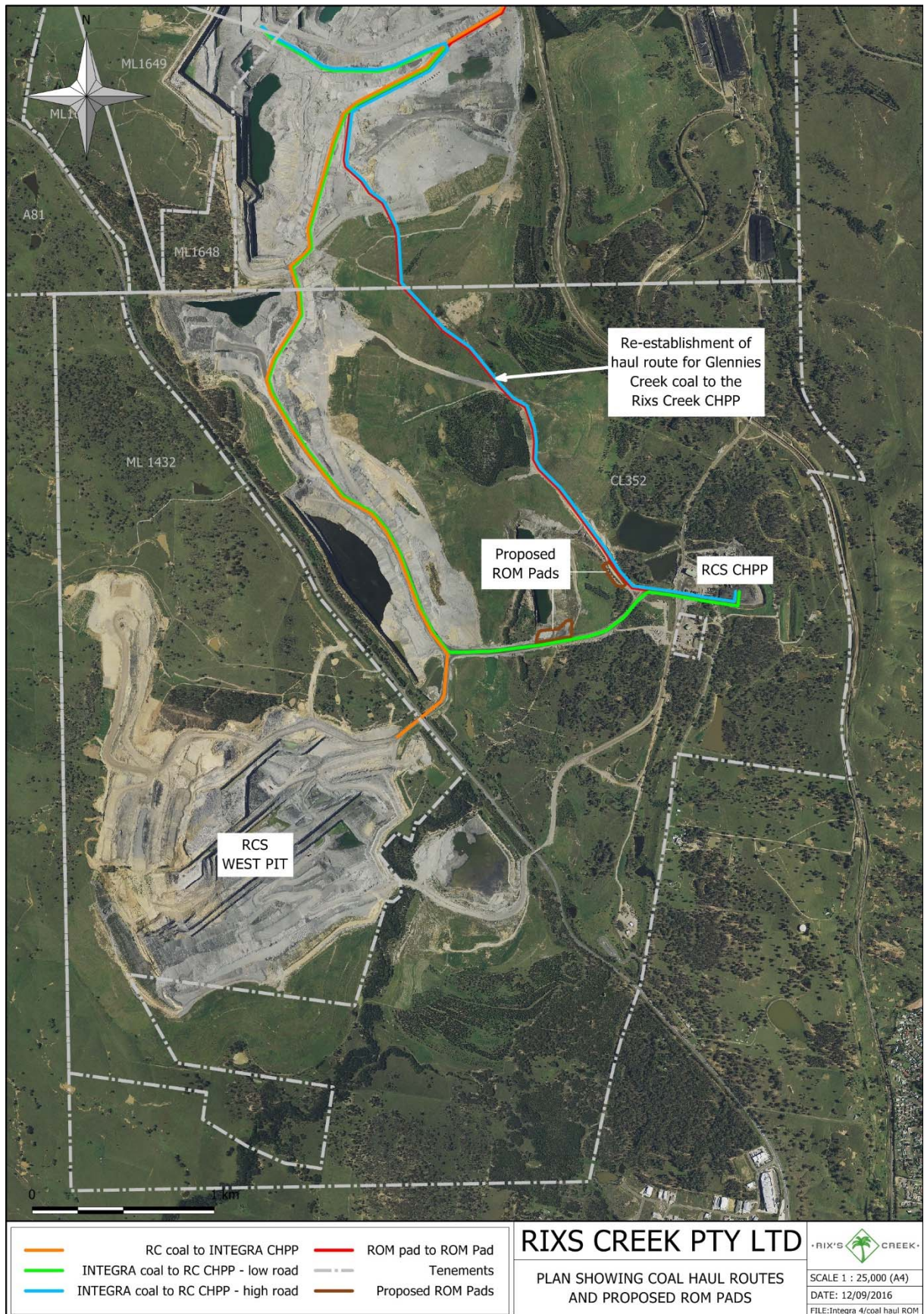


Figure 2: Site layout plan

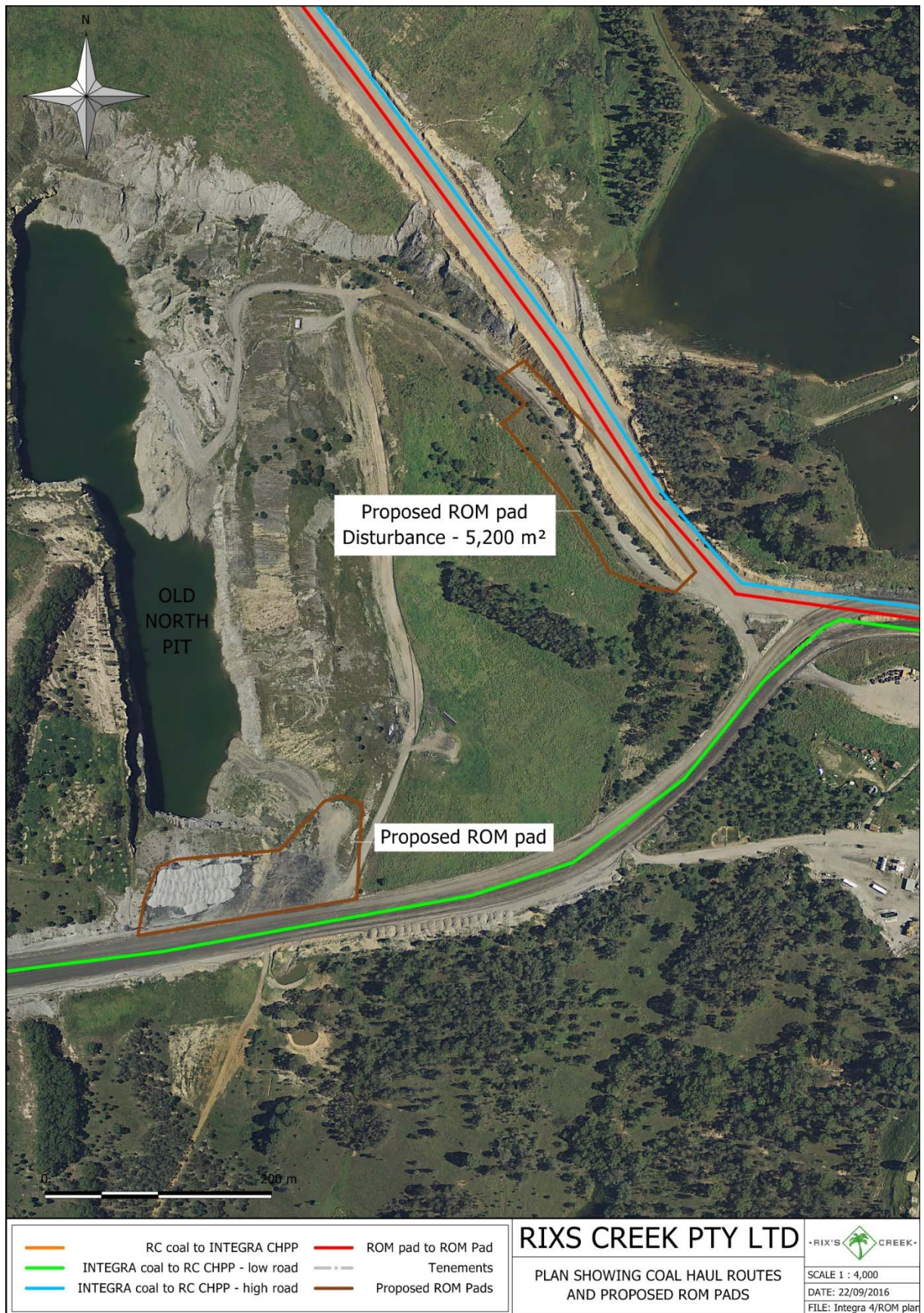


Figure 3: Location of proposed stockpiling areas

### 3.3 Environmental Planning Instruments

A number of environmental planning instruments apply to the modification, including:

- *State Environmental Planning Policy (SEPP) (Mining, Petroleum Production and Extractive Industries) 2007*;
- *SEPP (Infrastructure) 2007*;
- *SEPP (State and Regional Development) 2011*;
- *SEPP No. 33 – Hazardous and Offensive Development*;
- *SEPP No. 44 – Koala Habitat Protection*;
- *SEPP No. 55 – Remediation of Land*; and
- *Singleton Local Environmental Plan 2013*.

The Department has assessed the proposed modification against the relevant provisions of these instruments. Based on this assessment, the Department is satisfied that the proposed modification can be carried out in a manner that is consistent with the aims, objectives and provisions of these instruments.

## 4. CONSULTATION

Due to the minor nature of the proposed modification, the Department considered that public exhibition was not required. However, the application and Environmental Assessment (EA) (see **Appendix A**) were placed on the Department's website and comments were sought from the Environmental Protection Authority (EPA), Office of Environment and Heritage (OEH), the Division of Resources and Energy within the NSW Department of Industry (DRE), Hunter New England Health and Singleton Council. These authorities did not raise any objections regarding the proposed modification.

### 4.1 Agency Submissions

The Department received a total of 2 submissions from government agencies (see **Appendix B**).

**DRE** raised no objections to the proposed modification.

**OEH** did not object to the proposed modification. However, OEH recommended that a condition be imposed regarding the future rehabilitation of the proposed ROM pads. This recommendation was amended following further discussion with Bloomfield, reflected in a supplementary submission to the Department. This issue is addressed in **Section 5.3** of this report.

### 4.2 Public Submissions

The Department did not receive any public submissions.

## 5. ASSESSMENT

The Department has assessed the merits of the proposed modification in accordance with the relevant objects and requirements of the EP&A Act. In assessing these merits, the Department has considered the:

- Environmental Impact Statement (EIS) for the original development application;
- conditions of consent for the development as originally approved;
- modification application (MOD 8) and the associated EA (see **Appendix A**); and
- relevant environmental planning instruments, policies and guidelines.

The Department considers the key impacts of the modification relate to air quality, noise and biodiversity.

### 5.1 Air Quality

The EA included an Air Quality Assessment (AQA) prepared by Todoroski Air Sciences. This AQA utilised data from the more extensive AQA recently prepared for the Rix's Creek Coal Mine Extension Project (SSD 6300).

As no air quality criteria are specified in the existing consent, the development as proposed to be modified was assessed against the EPA's standard criteria as specified in the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (see **Table 1**).

**Table 1: EPA air quality impact assessment criteria**

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>
Total suspended particulates (TSP)	Annual	90 µg/m <sup>3</sup>
Deposited Dust	Annual	Max increase of 2 g/m <sup>2</sup> /month (incremental) Max total of 4 g/m <sup>2</sup> /month (cumulative)

Given that the proposed ROM pads would be located adjacent to existing CHPP haul roads, no additional transport-related air quality impacts are anticipated. Air quality impacts would therefore be limited to loading and unloading activities, and wind erosion of the stockpiles. The AQA estimates that the proposed modification would increase total dust emissions from the site by between 0.6 and 1.2 percent.

Historic monitoring data presented in the SSD 6300 AQA indicates that air quality impacts generated by Rix's Creek generally remain well within the criteria specified in **Table 1**. The proposed modification would increase PM<sub>10</sub> levels by less than 0.25 µg/m<sup>3</sup>, based on an annual average, and less than 0.5 µg/m<sup>3</sup>, over a 24-hour period. On this basis, the AQA concluded that the proposed modification is unlikely to lead to an exceedance of the relevant criteria.

The Department notes that air quality impacts would also be lessened, to some degree, by the nature of operations at the site. For example, the proposed ROM pads and the CHPP stockpiling area would not receive incoming ROM coal within the same 24 hour period. Similarly, on days when material is dispatched from the ROM pad to the CHPP, there would be no unloading of incoming ROM coal. As such, the AQA concludes that the dust impacts associated with the proposed ROM pads would be minor, and unlikely to be discernible, relative to the existing dust emissions from Rix's Creek.

However, the Department notes that the existing conditions of DA 49/95, as modified, do not reflect current drafting standards for the management of air quality impacts. In addition, the current conditions are not consistent with those imposed for Rix's Creek North under MP 08\_0102. These inconsistencies are likely to pose ongoing challenges for the integrated management of the complex.

On this basis, the Department considers that the outdated air quality management conditions of DA 49/95 should be replaced with contemporary conditions (see **Appendix C**). These conditions would require Bloomfield to employ all reasonable and feasible measures to ensure that its operations do not cause an exceedance of the criteria in **Table 1**. Bloomfield would also be required to prepare an Air Quality and Greenhouse Gas Management Plan, and to implement best practice air quality management on site. As these requirements align with those of Rix's Creek North, this would enable Bloomfield to develop a combined management plan for the complex.

Subject to these changes, the Department is satisfied that the air quality impacts of the proposed modification would be minimal, and would be suitably managed under the modified conditions of consent.

## 5.2 Noise

The EA included a Statement of Noise Impact (SNI) prepared by Global Acoustics. The SNI reviewed the noise impacts of the proposed modification in the context of the existing noise criteria for Rix's Creek under DA 49/94 (see **Table 2** below).

**Table 2: Existing noise criteria**

Receiver	LA10 Daytime Noise Level dB(A)	LA10 Daytime Noise Level dB(A)
The Retreat	42	40
Singleton Heights	42	40
Mason Dieu Road	38	38

The proposed ROM pads would be located further away from the three identified receivers than the existing stockpiling area at the CHPP. The pads would also be located at a lower elevation than the existing stockpiling area, which is located on the crest of a hill, between the mine and the nearby receivers. On this basis, the SNI concludes that any noise generated by loading and unloading activities at the proposed ROM pads would remain within the specified criteria in **Table 2**.

The Department is therefore satisfied that the noise impacts associated with the proposed modification would be negligible, and that the modified project would be able to operate in compliance with the specified noise criteria. Nonetheless, the Department considers that the existing noise management conditions should be updated to reflect current standards, and to provide increased consistency with the conditions of MP 08\_0102 (see **Appendix C**).

### 5.3 Biodiversity

The proposed ROM pad locations are wholly contained within previously disturbed overburden emplacement areas. On this basis, the Department considers that the proposed modification would have no significant impact on endemic biodiversity values, and would not necessitate any change to the existing offset requirements under the consent.

However, the construction of Pad 2 would require the disturbance of up to 0.52 ha of previously rehabilitated land. This area was previously used to store overburden from the Old North Pit, prior to the commencement of rehabilitation in 1992. This area was rehabilitated according to common practice for the 1990s, which included sowing pasture mix and exotic tree species.

In its submission, OEH noted that rehabilitation practices have improved considerably since this land was rehabilitated, and that future rehabilitation of the proposed ROM pads should be required to meet contemporary standards. OEH therefore recommended that an additional condition be imposed requiring Bloomfield to rehabilitate at least half the area of the new ROM pads with the 'trees over grass' mix proposed in the Rix's Creek Mine Rehabilitation Strategy (AECOM 2015). The Department notes that this strategy forms part of the EIS for SSD 6300. However, this development application has not yet been determined.

The Department also notes that existing conditions require Bloomfield to consult with OEH in the preparation of its Rehabilitation Management Plan (RMP). The RMP must be regularly updated, to reflect any modifications to the project, and to ensure that it reflects current best practice. On this basis, the Department considers that the concerns expressed by OEH would be adequately addressed under existing conditions of consent.

### 5.4 Other impacts

Other issues associated with the modification relate to water resources, Aboriginal heritage and visual impacts. **Table 3** summarises the Department's assessment of these impacts.

**Table 3: Other impacts**

Issue	Impact and Consideration	Recommendation
<i>Surface Water</i>	<ul style="list-style-type: none"> <li>The proposed pads would be constructed with sufficient cross-fall to enable surface water to drain to the Old North Pit, which is currently used for mine-water storage.</li> <li>Existing conditions require Bloomfield to prepare and implement a Water Management Plan (WMP) for the site.</li> </ul>	<ul style="list-style-type: none"> <li>The Department considers that surface water impacts associated with the proposed modification would be suitably managed under existing conditions, including the site's WMP.</li> </ul>
<i>Aboriginal Heritage</i>	<ul style="list-style-type: none"> <li>The proposed ROM pad sites have been previously subject to intensive mining-related activity.</li> <li>In its submission, OEH advised that, given the location and highly disturbed nature of the proposed ROM pad sites, these areas are unlikely to contain Aboriginal objects.</li> </ul>	<ul style="list-style-type: none"> <li>The Department is satisfied that the modification would have no impact on Aboriginal cultural heritage.</li> </ul>
<i>Visual Impacts</i>	<ul style="list-style-type: none"> <li>The proposed ROM pad sites are located within the footprint of existing mining activities. As such, they are very unlikely to significantly increase the visual impacts of the mine.</li> <li>Existing conditions of consent require Bloomfield to prepare a Landscape Management Plan to mitigate the visual impacts of its operations. Bloomfield would be required to revise, and if necessary, update this plan, to account for the additional stockpiling areas.</li> </ul>	<ul style="list-style-type: none"> <li>The Department is satisfied that the visual impacts of the proposed modification would be minimal, and would be suitably managed under existing conditions of consent.</li> </ul>

Issue	Impact and Consideration	Recommendation
	<ul style="list-style-type: none"> <li>Existing conditions also require Bloomfield to provide supplementary tree planting, as required by Council, in order to maintain the visual amenity of the area.</li> </ul>	

## 6. RECOMMENDED CONDITIONS

The Department has drafted a recommended notice of modification (see **Appendix C**) and a consolidated version of the consent as it is proposed to be modified (see **Appendix D**). The Department considers that the environmental impacts of the project can be appropriately managed through the proposed amended conditions of consent.

The Department has also taken the opportunity to further update existing conditions to reflect its current drafting standards, and to improve regulatory consistency across the Bloomfield complex. These changes relate to:

- off-site lighting impacts
- bushfire management;
- blasting;
- soil and water;
- meteorological monitoring;
- waste;
- preparation, revision and coordination of management plans;
- the Community Consultative Committee;
- independent environmental audits; and
- access to information.

Bloomfield has reviewed the recommended conditions and provided feedback. The Department has considered the company's comments in finalising the recommended notice of modification.

## 7. CONCLUSION

The Department has assessed the modification application, EA and submissions in accordance with the relevant requirements of the EP&A Act. The Department has carefully considered the likely impacts of the proposal on the natural and cultural environment, and on nearby residents. The Department is satisfied that the environmental impacts of the proposal would be of a minor nature, and could be appropriately managed by existing, modified and/or updated conditions of consent.


The proposed modification would facilitate the recommencement of mining operations at Rix's Creek North, and lessen the resulting congestion at the Rix's Creek CHPP. The Department considers that the establishment of the additional stockpiling areas would have minimal environmental impacts. Consequently, 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 Director, Resource Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the modification request falls within the scope of section 75W of the EP&A Act;
- **approves** the modification application DA 49/94 MOD 8, subject to conditions; and
- **signs** the attached notice of modification (**Appendix C**).

  
 20/12/16  
 Matthew Sprott  
 Team Leader  
 Resource Assessments

  
 Howard Reed  
 Director  
 20-12-16  
 Resource Assessments

# APPENDIX A: ENVIRONMENTAL ASSESSMENT

---

See: [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8084](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8084)

## APPENDIX B: SUBMISSIONS

---

See: [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8084](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8084)

## **APPENDIX C: NOTICE OF MODIFICATION**

---

## **APPENDIX D: CONSOLIDATED CONSENT**

---