

ASSESSMENT REPORT

Integra Underground Project & Integra Open Cut Project Separation of Consolidated Project Approval (MP 08_0101 MOD 5 & MP 08_0102 MOD 6)

1. BACKGROUND

The Integra Mining Complex (the Complex) is located 10 kilometres northwest of Singleton in the Hunter Valley, within the Singleton local government area (see **Figure 1**). The Complex comprises underground and open cut operations which have been operating since 1990.

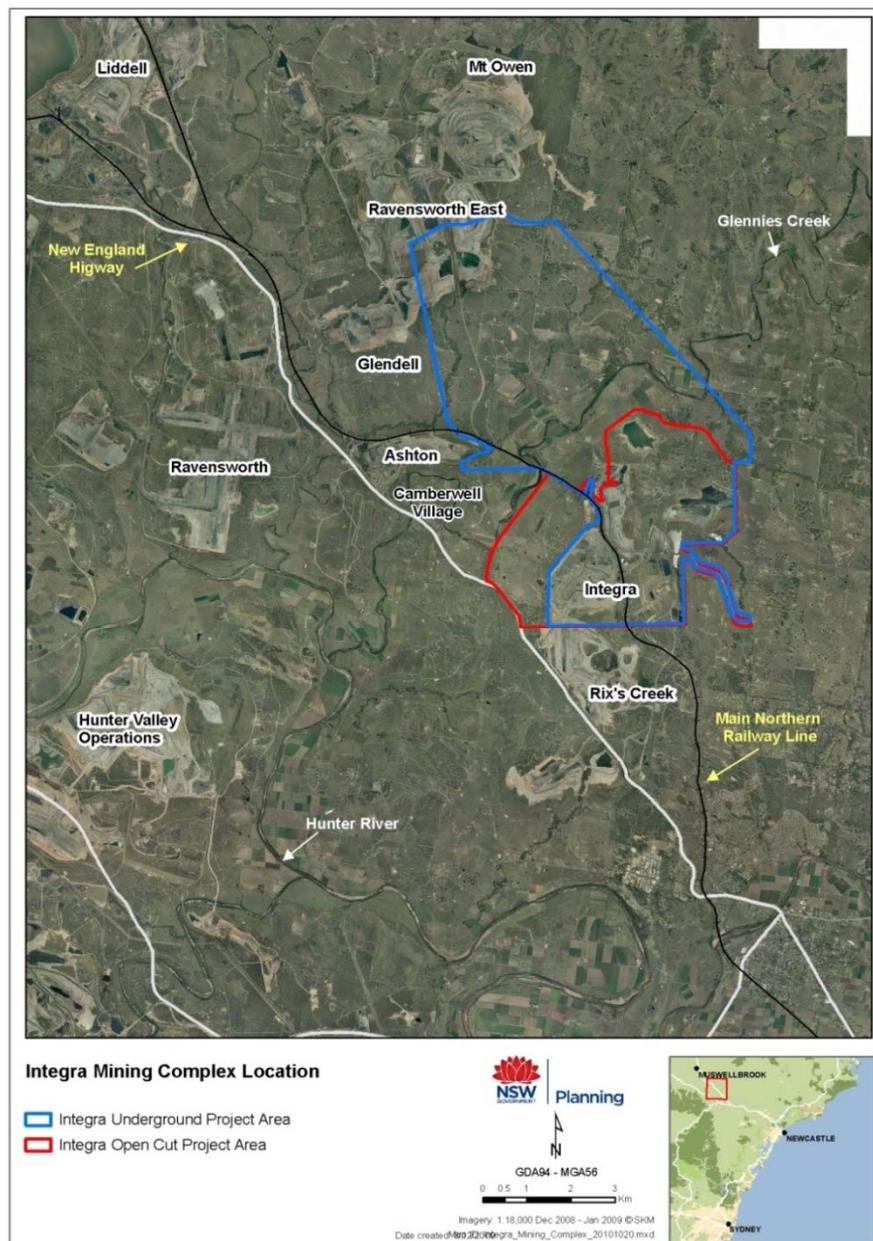


Figure 1: Location of the Integra Mining Complex

1.1 Consolidated Project Approval

The Complex is currently regulated by a single consolidated Ministerial project approval governing both the Integra Underground Project (MP 08_0101) and the Integra Open Cut Project (MP 08_0102). This consolidated approval was granted on 26 November 2010 by the then Minister for Planning under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The consolidated approval replaced existing consents and approvals for the Camberwell open cut mine (DA 86/2889), Glennies Creek open cut project (MP 06_0073) and Glennies Creek underground mine (MP 06_0057).

The consolidated approval has since been modified on four occasions, in:

- 2012, to extend an overburden emplacement area;
- 2013, to remove the requirement to install an overland conveyor (ie continue truck haulage) for transport of run of mine (ROM) coal to the on-site coal handling and preparation plant (CHPP);
- 2012, to adjust project approval timeframes to secure biodiversity offset areas; and
- 2016, to revise the biodiversity offset areas.

In February 2016, the Integra Open Cut Project was modified for a fifth time to allow ROM coal from Rix's Creek Coal Mine (Rix's Creek) to be transported and processed at the Integra CHPP.

Under the current consolidated approval, operations at Integra Open Cut are approved until 31 December 2022 with a maximum extraction rate of 1.5 million tonnes per annum (Mtpa) of ROM coal from the northern mining area and 4.5 Mtpa of ROM coal from the western mining area. Integra Underground is approved to produce a maximum of 4.5 Mtpa of ROM coal until 31 December 2035. The overall Complex is approved to dispatch up to 7.3 Mtpa of saleable coal by rail.

Integra Open Cut is a multi-seam operation that uses truck and shovel mining methods to extract semi-soft coking coal and thermal coal for export. Integra Underground is a multi-seam longwall operation that produces semi-hard coking coal for export.

Until recently, ROM coal from the Complex was processed at the on-site CHPP and transported by rail to the Port of Newcastle using a private rail load-out facility and rail loop that connects to the Main Northern Railway line. Underground operations at the Complex were placed in care and maintenance in July 2014. The open cut operations were placed in care and maintenance in August 2014.

1.2 Acquisition of the Complex

In December 2015, HV Coking Coal Pty Limited (HV Coking Coal), a subsidiary of Glencore Coal Pty Ltd (Glencore), acquired the Complex from Integra Coal Operations Pty Limited. Bloomfield Collieries Pty Limited (Bloomfield) then acquired Integra Open Cut from HV Coking Coal. Mining tenements and freehold land associated with the underground and open cut operations were transferred to the relevant companies (see **Figure 2**). Bloomfield's acquisition of Integra Open Cut included the Complex's CHPP, rail load-out facilities and surface infrastructure associated with the open cut mining operations. Part of the purchase contract requires Bloomfield to transport ROM coal from Integra Underground to the Integra Open Cut CHPP or the Rix's Creek CHPP for processing.

Glencore and Bloomfield now intend to carry out separate mining operations at Integra Underground and Integra Open Cut, respectively. The modification applications considered in this report relate to the separation of the Complex's consolidated project approval to allow Glencore and Bloomfield to independently manage their operations.

1.3 Integra Underground Project

Integra Underground will continue to be managed by Glencore in accordance with a care and maintenance Mining Operations Plan (MOP) approved the Division of Resources and Energy (DRE) of the Department of Industry.

Glencore is currently reviewing its future mining options. If and when operations recommence at Integra Underground, Bloomfield will manage Glencore's underground ROM coal from stockpiling through to processing and rail transport. The Department understands that, under this arrangement, Glencore would extract coal underground and convey it to a dedicated ROM coal stockpile, after which Bloomfield would then haul the ROM coal by truck to the Integra Open Cut CHPP or Rix's Creek CHPP for processing and rail load out.

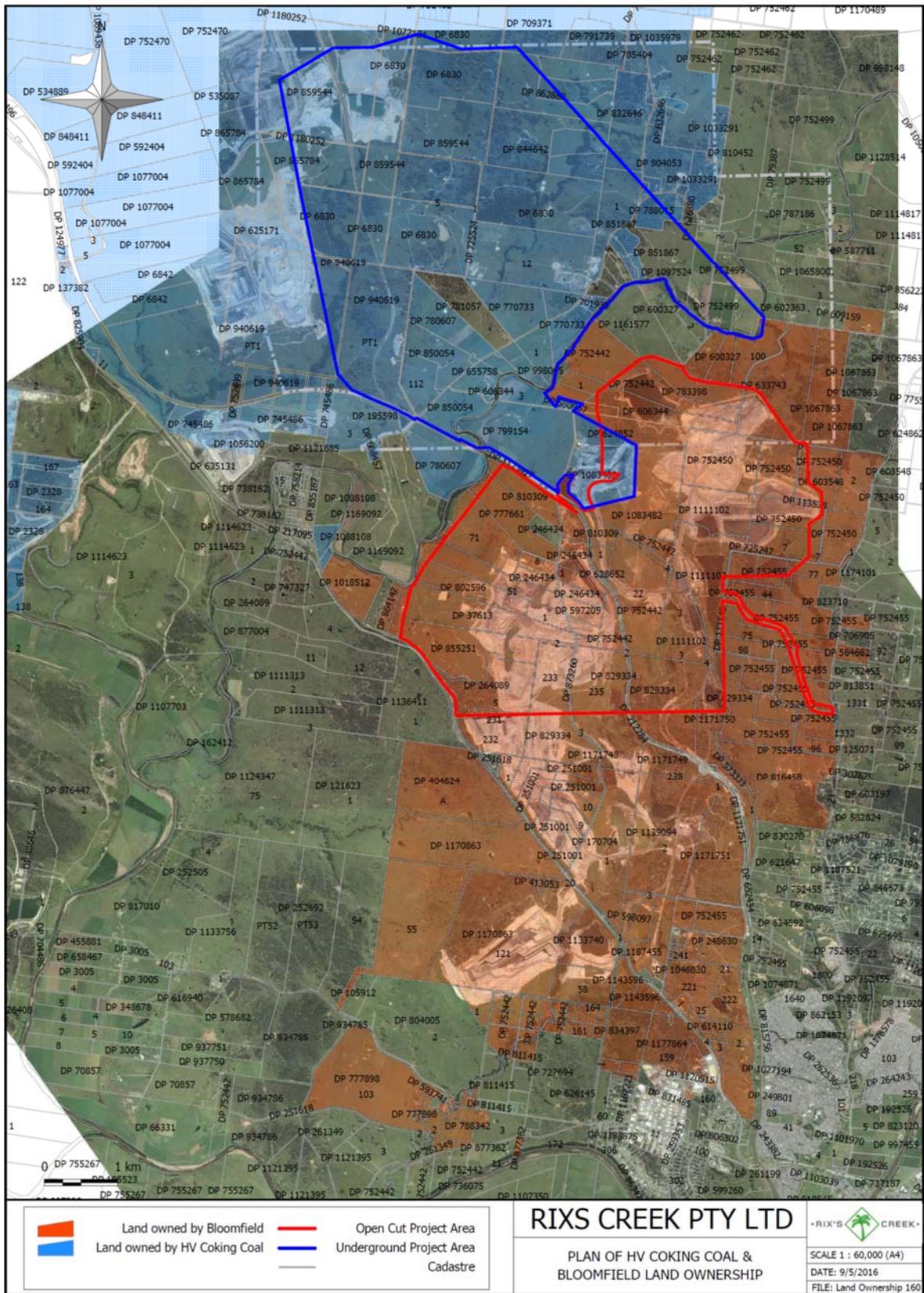


Figure 2: Land ownership and proposed project boundaries as a result of the acquisition

Potential synergies may also exist with Glencore’s Mount Owen Coal Complex, located immediately north-northeast of Integra Underground. Glencore is currently seeking approval for the continuation of mining at Mount Owen through a separate State Significant Development (SSD) application (Mount Owen Continued Operations Project, SSD 5850).

The Environmental Protection Licence (EPL) for the Complex (EPL 3390) was transferred to Glencore and then varied by the EPA on 21 December 2015 to only include underground activities.

1.4 Integra Open Cut Project

Bloomfield has recommenced mining operations at Integra Open Cut. A new MOP was approved by DRE on 18 January 2016 authorising production of 1 Mtpa of saleable coal from the western extension of the South Pit.

Bloomfield has proposed to rename Integra Open Cut as Rix's Creek North; however this report will continue to refer to the current name of the project under the existing project approval (Integra Open Cut) until the approval is modified. Bloomfield is also integrating Integra Open Cut with its existing operations at Rix's Creek, located immediately to the south. To facilitate this integration, both the Integra Open Cut project approval and the Rix's Creek development consent were modified in February 2016 to allow ROM coal from Rix's Creek to be transported to Integra's CHPP for processing and to allow ROM coal from Integra Open Cut to be transported to Rix's Creek CHPP for processing.

Separate to the current modification applications, Bloomfield is also seeking approval for the continuation of mining at Rix's Creek until 2038 and the extension of open cut operations in Pit 3 (West Pit) through a separate SSD application (Rix's Creek Extension Project, SSD 6300).

The EPL for Rix's Creek (EPL 3391) was varied by the EPA on 21 December 2015 to incorporate operations at Integra Open Cut.

2. PROPOSED MODIFICATION

In order to independently manage operations at Integra Underground and Integra Open Cut, Glencore and Bloomfield have sought approval to modify the existing project approvals to:

- separate the Complex's consolidated project approval instrument into two separate approvals for the underground and open cut operations;
- modify the boundaries of the underground and open cut project areas; and
- allow for previously approved open cut mining activities to continue at Integra Open Cut for an extended period of time - a further 13 years (from 31 December 2022 to 31 December 2035).

Bloomfield has advised that this extension of project life is required to access coal resources that would remain in the current approved open cut project area at the end of 2022. Further, this extension is required to align with the lapse date of the Integra Underground project approval to enable the handling and processing of underground ROM coal at the Integra Open Cut CHPP and rail load-out, if Glencore recommences operations at Integra Underground.

There are no other changes proposed to any other aspect of the approved mining operations, including mining methods and extraction quantities. No additional construction, ground disturbance or vegetation clearance would be required as a result of the proposed modifications. The only material change to the project sought by Glencore and Bloomfield (other than an extension of time to the Integra Open Cut project approval) is a small variation to the project boundary to include the eastern extent of Tailings Dam 2 (TD2). The additional area covers 8 hectares (ha) of land that was previously identified as being located outside of the approved project area boundary by an independent audit undertaken in December 2014, during the previous ownership of the Complex.

The modifications are described in detail in the Environmental Assessment (EA) submitted in support of the Application (see **Appendix A**).

3. STATUTORY CONTEXT

3.1 Section 75W

The application proposes to modify project approvals MP 08_0101 and MP 08_0102. Such project approvals fall within the definition of 'transitional Part 3A projects' and must still be modified under the now-repealed section 75W of the EP&A Act. The effect of section 75W for such approvals and consents is continued by transitional provisions found in clause 12 of Schedule 6A of the EP&A Act.

The modifications would not change the overall nature of the projects, or the associated environmental impacts assessed prior to grant of the original project approvals. Given these considerations, the Department is satisfied that the proposed modifications are 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 proposed modifications. However, under the Minister's delegation of 16 February 2015, the Director Resource Assessments may determine the Integra Open Cut modification application, as no public objections were received, Singleton Shire Council (Council) did not object to the proposal, and no political donations were reported by Bloomfield. However, the Planning Assessment Commission (PAC) must determine the Integra Underground modification application, because Glencore has reported political donations. Consequently, due to the interrelated nature of the assessment for the two modifications, the Department considers it appropriate to refer both applications to the PAC for its determination.

4. CONSULTATION

Due to the minor (essentially administrative) nature of the proposed modifications, the Department is not required to undertake any public exhibition. However, the modification applications and the accompanying EA were made available on the Department's website immediately following their receipt on 16 February 2016. No public submissions have been received as a result.

The Department also invited six government agencies to comment on the EA and to recommend conditions of approval.

Council, DRE, Department of Primary Industries (DPI) and the **Office of Environment and Heritage (OEH)** had no objections or comments on the proposed modifications. The **Environment Protection Authority (EPA)** did not raise any issues with the proposals and was satisfied that each site's EPL sufficiently covers matters within its responsibilities. At the time of completing this report, no response had been received from the **Mine Subsidence Board**.

The Department also placed additional information, provided by Glencore and Bloomfield during the assessment, on its website on 5 July 2016. The Department invited the EPA to comment on the information as some of the matters concerned noise and air quality. The EPA again did not raise any issues with the additional information provided.

The Department is satisfied that the notification process met the requirements of the EP&A Act and the EP&A Regulation.

5. ASSESSMENT

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

- EAs for the two original project applications;
- conditions of approval for the project as originally approved and since modified;
- modification applications, EA and additional information provided by Glencore and Bloomfield; and
- relevant environmental planning instruments, policies and guidelines.

The Department has prepared a Notice of Modification (NoM) for each project approval based largely on the existing conditions of the consolidated approval. Each NoM also reflects the changes necessary to separate the consolidated approval so that underground and open cut operations can be managed independently. Conditions in each approval provide separate requirements where these were previously integrated across the two operations, such as relevant management plans for each project. Each NoM also removes redundant conditions and contemporises the project approvals.

The approach taken by the Department in preparing each NoM has involved consideration of the:

- complex-wide conditions that require revision;
- conditions specific to underground operations;
- conditions specific to open cut operations;
- updating of conditions to contemporary standards; and
- updating appendices.

The outcomes of this review are discussed in the following sections of this report.

5.1 Complex-wide Conditions

As discussed above, Bloomfield and Glencore intend to operate the Integra Open Cut and Integra Underground projects separately. To allow for this separation, a number of conditions relating to Complex-wide activities and impacts require to be amended to appropriately reflect project-specific activities and impacts. These conditions relate to landholder rights, noise, air quality, community consultation, management plans and annual reviews.

5.1.1 Acquisition and Mitigation Rights

The Department has reviewed all acquisition and mitigation rights for the Complex to ensure that all existing landholder rights are maintained under the separated project approvals. **Table 1** below summarises the proposed separation of acquisition and mitigation rights by impact and project responsibility.

Table 1: Summary of allocated acquisition and mitigation rights

Residential Receiver No.	Acquisition Basis - Responsibility	Mitigation Basis - Responsibility
5 – D P Cox	-	Noise - Open Cut
6 – W G Cox	-	Noise - Open Cut
8 – DK Geelan	-	Noise - Open Cut
9 – W & N Pendered*	Noise - Open Cut	Noise - Underground
10 – E & B Kleinman*	Noise - Open Cut	Noise - Underground
11 – F Ferraro	Noise - Open Cut	Noise – Underground (post open cut)
13 – P & K Russell*	Noise - Open Cut	Noise - Underground
14 – M Hoggan	-	Noise - Open Cut
16 – A Lambkin	-	Noise - Open Cut
20 – Mr Garvie	-	Noise - Open Cut
31 – C Craven	-	Noise - Open Cut
32 – M Langdon	-	Noise - Open Cut
47 – B & R Cherry	Air Quality - Underground Subsidence - Underground	Noise - Open Cut
48 - G Cheetham	-	Noise - Open Cut
50 – D & M Bridge	-	Noise - Open Cut
53 – K & J Badior	-	Noise - Open Cut
54 – G Holmes	-	Noise - Open Cut
62 – D Moran	-	Noise - Open Cut
63 – J & M Moore	-	Noise - Open Cut
64 – W & A Gardner	Noise - Open Cut	Noise – Underground (post open cut)
80 – G Donnellan	Noise - Underground	-
87 – B & R Richards	Noise - Open Cut	Noise – Underground (post open cut)
88 – M & T De Jong	-	Air Quality - Open Cut
91 – T & D Olofsson	-	Noise - Open Cut
95 – J & T Clarke	-	Noise - Open Cut
105 – J & G McInerney	-	Noise - Open Cut
106 – B & R Richards	Noise - Open Cut	Air Quality - Open Cut
110 – G J Hall*	Noise - Open Cut Air Quality - Open Cut	-
111 – T Burgess	Noise - Open Cut	Air Quality - Open Cut
112 – S & C Ernst*	Noise - Open Cut	Air Quality - Open Cut
153 – R & D Hall	Noise - Open Cut Air Quality - Open Cut Noise – Underground (post open cut)	-
161 – V Lopes	-	Noise - Open Cut
351 – Andrews	Noise - Open Cut	-
352 – Andrews	Noise - Open Cut	-
363 – D & L Bynon	-	Noise - Open Cut

*Acquisition and mitigation rights have been removed because the receivers are now mine-owned

Acquisition and mitigation responsibilities have been separated considering the primary source of impacts. The Department has also considered the two original project EAs, particularly the noise and air quality impact assessments, as they were initially undertaken on an individual project basis (and subsequently revised to consider cumulative Complex-wide impacts).

In respect of acquisition rights, the following is noted:

- Receivers 9, 10, 13, 110 and 112 have previously been acquired by Integra Coal Operations and therefore acquisition rights are no longer relevant. The Department has removed references to these receivers, to simplify the consents;
- Receiver 47 has acquisition rights under Integra Underground because of subsidence impacts and air quality impacts associated with underground mining activities. The air quality impacts are primarily from haul trucks transporting ROM coal from the underground workings. Notwithstanding that this impact would be caused by operations undertaken by Bloomfield, the responsibility to pay for acquisition for such impacts rightly falls to Glencore;
- Receiver 80 has acquisition rights under Integra Underground due to noise emissions from the Integra Underground surface infrastructure;
- Receiver 153 has acquisition rights under both projects, due to air quality impacts from Integra Open Cut and noise impacts from both projects. Acquisition rights due to noise impacts at Integra Underground would only have effect when open cut mining operations at Integra Open Cut have been placed on care and maintenance or have permanently ceased. Further justification for this is provided in **Section 5.1.2** below; and
- Receivers 11, 64, 87, 106, 111, 351 and 352 have acquisition rights under Integra Open Cut because these receivers are located in the vicinity of the Integra Open Cut and are primarily impacted by open cut operations.

In respect of mitigation rights, the following is noted:

- Receivers 9, 10, 13 and 112 have been acquired by Bloomfield and therefore mitigation rights no longer apply. The Department has removed references to these receivers.
- Noise-related mitigation responsibilities for Integra Underground would only have effect when open cut mining operations at Integra Open Cut have been placed on care and maintenance or have permanently ceased. Further justification for this is provided in **Section 5.1.2** below.

5.1.2 Noise

The consolidated approval currently contains Complex-wide noise criteria. In consultation with Bloomfield and Glencore, the Department has carefully considered all options for noise conditioning in the separated project approvals. The two fundamental options are to:

- retain Complex-wide conditions as under the current consolidated approval; or
- apply different noise criteria in each project approval.

The latter option would be ideal, so as to allow the projects to separately manage and monitor their noise emissions, ensuring they remain responsible for their attributable noise impacts. However, it is impossible to satisfactorily differentiate noise sources between the two projects because of the sheer number of sources and their close proximity to one another. This would lead to significant problems regarding effective monitoring and compliance.

Even if it were possible to accurately differentiate between noise sources, the Integra Underground approval would still warrant minimum criteria of 35 dB(A) on all privately owned land, reflecting guidance in the *NSW Industrial Noise Policy*. When considering the potential cumulative impacts from having two sets of noise criteria (even where one set were the minimum of 35 dB(A)), the outcome would be criteria higher than those currently set in the unified complex-wide criteria in the consolidated approval. This would be an adverse outcome for the community.

In these circumstances the companies have agreed there would be no benefit to either company or to the community in establishing separate noise criteria. As such, it is proposed that the Integra Open Cut approval would retain all current Complex-wide noise conditions and Integra Underground would adopt the alternate noise criteria as set out in Appendix 6 of the consolidated approval. The criteria in Appendix 6 were derived during the original assessment of the consolidated approval to reflect noise emissions once open cut mining ceased. On this basis, the noise criteria in the Integra Underground approval would remain in abeyance until open cut mining activities (extraction and processing) at Integra Open Cut have either ceased or placed on care and maintenance.

This approach is further supported by the operational agreement between Bloomfield and Glencore (see **Section 1.2**). Since Bloomfield will be hauling all produced underground ROM coal to either the

Integra CHPP or Rix's Creek CHPP, the key underground noise sources (ie ROM coal haulage) would be accommodated under the Integra Open Cut noise criteria, as at present.

However, in order to ensure Glencore remains responsible for managing and mitigating noise emissions from underground activities in the absence of noise criteria while ever the open cut remains operational, the Department proposes the retention in the Integra Underground approval of detailed noise management operating conditions and an ongoing requirement to prepare and implement a Noise Management Plan. A new operating condition has also been added which would require Glencore to implement all reasonable and feasible measures to minimise noise emissions from noisy plant and equipment on site, including both fixed and mobile sources.

The recommended option of Integra Open Cut maintaining the Complex-wide noise conditions and Integra Underground adopting the alternate noise conditions when open cut operations are not taking place results in the best outcome for community, being that the current combined noise criteria across the two sites would not increase, while still providing for effective management of all key underground noise sources.

5.1.3 Air Quality

The Department considers that both projects should retain conditions requiring adherence to contemporary air quality criteria. However, when considering the magnitude of dust emissions between the two sites (ie the great majority of dust emissions are associated with Integra Open Cut), the Department agrees with Glencore that some of the acquisition and mitigation requirements relating to air quality exceedances are appropriate only to the Integra Open Cut approval and that it is unreasonable to also impose them on the Integra Underground approval.

Dust emissions associated with Integra Underground are limited to ROM coal stockpiling, ROM coal haulage and emissions from ventilation shafts. These emissions are minor in comparison to the dust emissions generated by Integra Open Cut. Therefore, the Department agrees with Glencore that air quality acquisition criteria and the additional dust mitigation measures should be removed from the Integra Underground approval.

Notwithstanding this, the Department has retained and strengthened all air quality management operating conditions and an ongoing requirement for Integra Underground to prepare and implement an Air Quality and Greenhouse Gas Management Plan. Similarly, the Department has maintained and strengthened the equivalent air quality management conditions in the Integra Open Cut approval.

5.1.4 Community Consultative Committee

A Community Consultative Committee (CCC) was previously required for the Complex as a whole under the consolidated approval. The modification proposes to dissolve this CCC and invite the CCC community members to join Bloomfield's Rix's Creek CCC and/or Glencore's Mount Owen Mining Complex CCC.

At the Complex's CCC meeting held on 17 February 2016, the community members were briefed on the changes and invited to join the other CCCs. Two of the community members are already existing members of the Mount Owen Mining Complex CCC, and one additional community member volunteered to also join this CCC. The CCC has since met (18 March 2016) and agreed to accept the new Integra representative. The Department is satisfied that the Mount Owen Mining Complex CCC would provide an appropriate forum for discussion between Glencore representatives, the community, local council and other stakeholders on issues related to Integra Underground.

Four community members from the Complex's CCC volunteered to join the Rix's Creek CCC. The Rix's Creek CCC met on 10 May 2016 and agreed to accept the Integra representatives and for them to be invited to the next Rix's Creek CCC meeting scheduled for 20 September 2016. The Department is satisfied that the Rix's Creek CCC would provide an appropriate forum to discuss issues related to Integra Open Cut.

The Department is now proposing conditions in each of the new project approvals that allow their CCC functions to be amalgamated with the CCCs for neighbouring projects (such as Rix's Creek and Mount Owen). Similar conditions will be proposed for inclusion in SSD 5850 and SSD 6300.

5.1.5 Environmental Management Plans, Programs and Strategies

Under the consolidated approval, the following environmental management strategies and plans are currently required to be prepared and implemented for the Complex:

- Environmental Management Strategy;
- Noise Management Plan;
- Blast Management Plan;
- Air Quality & Greenhouse Gas Management Plan;
- Water Management Plan;
- Biodiversity Management Plan;
- Heritage Management Plan;
- Rehabilitation Management Plan;
- Glennies and Station Creek Riparian Management Plan; and
- Waste Management Plan.

Glencore has proposed to continue managing Integra Underground operations under the provisions of the existing approved management plans and programs. While Glencore is not proposing any changes to the existing strategies, plans or programs, it still must review, and if necessary revise these strategies, plans or programs within three months of the date of the proposed modification of the Integra Underground project approval.

Bloomfield has proposed to consolidate the Rix's Creek and Integra Open Cut environmental management plans by restructuring a number of Rix's Creek plans to also comply with the conditions of the Integra Open Cut approval. Bloomfield has begun to progressively update the Rix's Creek plans in this manner. A consolidated Rix's Creek and Integra Open Cut Noise Management Plan was recently submitted to the Department and subsequently approved on 16 February 2016. At the same time, standalone management plans for Blasting, Air Quality & Greenhouse Gas, Water, Heritage and Waste at Integra Open Cut were also approved. The Department understands that Bloomfield intends to consolidate these management plans in due course to reflect joint operations at Rix's Creek and Integra Open Cut.

The Department proposes a condition in each of the new project approvals to allow (with the agreement of the Secretary) strategies, plans or programs to be combined with similar plans at adjacent projects. This would allow for Integra Open Cut and Rix's Creek to combine environmental management responsibilities, and this would also give Glencore the flexibility to potentially combine Integra Underground's environmental management plans with those for the Mount Owen Complex.

The Department has generally maintained or strengthened all existing management plan requirements in both project approvals. However, the Department has simplified the Integra Underground condition requiring a Biodiversity Management Plan, because all biodiversity offset responsibilities would be included in the Integra Open Cut approval (refer to **Section 5.3** below), and Glencore has not proposed any major surface disturbance. The Department has also removed the conditions requiring the preparation and implementation of a Blast Management Plan, since blasting activities and related impacts relate to open cut mining operations only.

5.1.6 Annual Review

An Annual Review of environmental performance is currently required under the consolidated approval. Starting with the 2015 calendar year, Glencore and Bloomfield have prepared separate Annual Reviews for Integra Underground and Integra Open Cut.

The Department agrees with this approach and has proposed that each of the new project approvals contain conditions requiring an Annual Review. The Annual Reviews will continue to address operations over each calendar year and be due at the end of the following March.

5.2 **Conditions Specific to Integra Underground**

Several conditions in the consolidated approval relate solely to underground activities. Conditions which the Department recommends are retained only in the Integra Underground approval are discussed below.

5.2.1 Subsidence and Creek Diversions

Underground mining activities and subsequent subsidence impacts relate solely to Integra Underground, therefore all conditions related to subsidence and creek diversions required due to subsidence are proposed to be continued only in the Integra Underground approval.

There are some historic (pre-1930s) underground workings within the proposed Integra Open Cut project boundary, near the Integra CHPP and former Camberwell North Open Cut. There is no record of underground workings near the active Integra Open Cut mining areas (Western extension and Northern mining areas). The Department is satisfied that no additional subsidence impacts would occur from the historic underground workings due to the period of time since active underground mining occurred and due to the distance of these workings from active open cut mining. Therefore, there is no need for any conditions relating to subsidence to be retained within the Integra Open Cut approval. However, to ensure Bloomfield remains responsible for maintaining the safety of the closed underground workings, the Department proposes the retention of a rehabilitation objective in the Integra Open Cut project approval to address this issue.

The proposed Integra Underground approval maintains all existing conditions relating to managing, mitigating, rehabilitating and compensating for subsidence impacts. This includes maintaining the acquisition-upon-request requirement for receiver 47, insofar as it relates to subsidence.

Integra Underground would also maintain conditions related to the preparation of Extraction Plans for all second workings to ensure the project continues to comply with the consent's subsidence impact performance measures and remediation requirements. The Integra Underground project approval would still include a subsidence impact performance measure requiring Glencore to have negligible impact on the Glennies Creek alluvial aquifers. In keeping with this performance measure, longwall panels are not located below the Glennies Creek channel and alluvium in the existing Integra Underground mine plan.

The Department has also proposed a new condition that further clarifies the relationship between Extraction Plans and other management plans, being that the consent's principal Water, Biodiversity and Heritage Management Plans should cover all aspects of the project that are not covered by an approved Extraction Plan.

The Integra Underground project underlies a large area of the Mount Owen Complex. The approved longwall layout for Integra Underground underlies the proposed North Pit Continuation Area, which is currently subject to assessment under SSD 5850. In the published draft approval conditions for SSD 5850, the Department has proposed blasting restrictions to minimise subsidence impacts at Integra Underground and to enable safe underground mining operations. The proposed Blast Management Plan for the Mount Owen Complex also requires an agreed strategy for the management of potential blast interactions within 500 metres of any approved or developed underground workings at Integra Underground.

Additionally, the Department has proposed a new condition in the Integra Underground approval requiring Integra Underground to consider Mount Owen's revised surface infrastructure, landforms and operations in any Extraction Plan. As both projects are owned by Glencore, the Department is satisfied that any further issues related to the overlapping projects can be managed in a straightforward fashion.

Conditions relating to the diversion of Bettys Creek and Main Creek have been retained in the Integra Underground approval. Prior to undermining Bettys Creek and Main Creek, Glencore would still be required to divert the creeks to mitigate subsidence impacts on the integrity of the creek systems and to avoid groundwater drawdown.

5.2.2 Middle Falbrook Road Intersection

The main access to Integra Underground is from Middle Falbrook Road. To improve the safety and performance of the intersection, a condition was included in the consolidated approval requiring Integra Coal Operations to design and construct the Middle Falbrook Road intersection to the reasonable satisfaction of Council prior to commencing construction activities that require access from Middle Falbrook Road to the site.

While this condition relates to the underground activities, the Department notes that this work has been completed and therefore the condition is now redundant. The Department has therefore proposed removal of this condition from the Integra Underground approval.

5.3 Conditions Specific to Integra Open Cut

Several conditions in the combined project approval relate solely to open cut activities. The following sections detail the conditions the Department has recommended be retained in the Integra Open Cut approval, but removed from the Integra Underground approval.

5.3.1 Blasting

As significant blasting activities relate solely to open cut mining operations, the Department has recommended that all conditions related to blasting be removed from the Integra Underground approval. Integra Open Cut would continue to be required to comply with the Department's standard operating conditions for blasting, which include requirements to protect the safety of people and livestock in the surrounding area, and to protect property from blasting damage. Bloomfield has proposed to continue to implement a Blast Management Plan at Integra Open Cut to minimise impacts on nearby neighbours. The Department has also proposed a condition requiring Integra Open Cut to co-ordinate blasting schedules with nearby underground mines, particularly Integra Underground, to minimise operational disturbance and to ensure the safety of underground personnel.

5.3.2 Glennies Creek and Station Creek Alluvial Aquifers

Under the consolidated project approval, open cut mining operations are not permitted within 150 m of the Glennies Creek alluvial aquifer or Station Creek alluvial aquifer, unless approved by the Secretary. As this condition relates solely to open cut activities, the Department has recommended that it is retained solely in the Integra Open Cut approval.

5.3.3 Biodiversity Offsets and Conservation Bond

The consolidated project approval requires that a Biodiversity Offset Strategy is implemented. Modification 4 of the consolidated approval required that this strategy include permanent conservation of 614 ha across five biodiversity offset areas (BOAs). All but 6 ha of this total is attributable to surface disturbance from open cut activities. The 6 ha attributable to underground activities relates to the proposed clearance of the *Central Hunter Swamp Oak Forest* vegetation community in Glendell Mine's existing Habitat Management Area for the diversion of Bettys Creek.

The underground offset requirement is currently encompassed in the approved 194 ha Martins Creek BOA which includes 13.2 ha of *Central Hunter Swamp Oak Forest* vegetation community. Martins Creek BOA is located just east of the boundary of the Integra Open Cut project on private land owned by Bloomfield. Bloomfield and Glencore have proposed to allocate all biodiversity offset responsibilities to Bloomfield under the Integra Open Cut approval due to the impracticality of separately managing a 6 ha area located within the larger Martins Creek BOA.

The Department accepts this position and has recommended removing the requirement for a biodiversity offset strategy from the Integra Underground approval. The biodiversity offset conditions for the Integra Open Cut approval therefore include all responsibilities relating to the 6 ha Integra Underground offset. Bloomfield would continue to be required to comply with conditions related to the long term security of all offsets, biodiversity management, biodiversity audits and lodgement of a conservation bond. This 6 ha area would therefore be effectively and efficiently managed.

5.3.4 Heritage

Under the consolidated project approval, further archaeological investigations must be undertaken around the Dulwich property prior to carrying out any mining-related development in the area. To date, no development has been planned in this area and therefore no archaeological surveys have been undertaken.

Glencore has proposed removal of this condition from the Integra Underground project approval. The survey area shown in Appendix 8 of the existing consolidated project approval overlaps with the project boundaries for both the Integra Underground and Integra Open Cut approvals. Following discussions with Glencore, the Department understands that no surface activities are proposed for the archaeological area that overlies Integra Underground. As a result, the boundary of the archaeological investigation area has been adjusted and included in the Integra Open Cut approval only.

5.3.5 Extension of time

Under the consolidated approval, open cut mining operations are approved until 31 December 2022. Bloomfield has requested to extend this period by a further 13 years to align with the expiry of the Integra Underground approval in 2035. The extension of time would allow Bloomfield to extract the remaining viable resources at Integra Open Cut and also enable ROM coal from Integra Underground to continue to be processed and handled at the Integra Open Cut surface infrastructure and facilities beyond 2022.

Bloomfield has advised that significant coal resources previously approved for extraction will still be available at Integra Open Cut beyond 2022, due to previous and ongoing reductions or suspensions in

production. Bloomfield estimates that, at current projected production levels, remaining coal resources in 2022 will be 30 million tonnes.

There are no proposed changes to the rate of production, mining method or mine infrastructure at Integra Open Cut. The proposed continued extraction of coal would occur in an already approved mining area, with no additional environmental impacts other than those that have been previously assessed and approved. All future mining would be subject to the environmental standards contemporised under this modification and would be undertaken in accordance with the management plans and strategies to be consolidated with Rix’s Creek. The proposed extension of time would provide socio-economic benefits, including ongoing employment for mine staff as well as royalty payments to the NSW Government, for the period of extension.

The Department therefore considers the proposed extension of the approved mine life to be appropriate.

5.4 Contemporary Framing of Conditions

Some ‘standard’ conditions in the existing consolidated approval include certain out-dated requirements and wording. More-recent mining consents contain conditions which are either expressed more precisely or else reflect revised contemporary expectations for environmental management. The Department believes that updating the existing project approvals would facilitate effective management and regulation of both Integra Underground and Integra Open Cut according to contemporary standards.

Consequently, the Department has replaced, modified or else incorporated within similar contemporary conditions, the consolidated approval conditions listed in **Table 2** below.

Table 2: Contemporised conditions

Proposed Approvals		Proposed Revision
Aspect	Condition	
Obligation to Minimise Harm to the Environment	Cdn 1 of Sch 2	Additional wording to include an obligation to meet the specific performance measures in the project approvals
Acquisition Upon Request	Cdn 1 of Sch 3	Additional wording on non-contiguous parcels of land that may be subject to acquisition rights
Noise Measurements	Cdns 2-7 of Sch 3	Additional wording requiring noise measurements to be conducted in accordance with the <i>NSW Industrial Noise Policy</i>
Noise Operating Conditions	Cdn 8 [9] of Sch 3	Updated wording
Noise Management Plan	Cdn 9 [10] of Sch 3	Updated wording
Air Quality & Greenhouse Gas Management Plan	Cdn 15 [27] of Sch 3	Updated wording
Water Supply	Cdn 22 [29] of Sch 3	Note changed to a condition to ensure all necessary water licences for the project are obtained
Water Management Plan	Cdn 31 [36] of Sch 3	New paragraph requiring development of detailed performance criteria
Visual Amenity and Lighting	Cdn 34 [46] of Sch 3	Updated wording
Waste	Cdn 36 [48] of Sch 3	Updated operating requirements and removal of requirement to prepare a Waste Management Plan
Rehabilitation Objectives	Cdn 38 [50] of Sch 3	Updated and additional objectives reflecting contemporary standards
Independent Environmental Audit	Cdns 12-13 [11-12] of Sch 5	Updated wording requiring the audit to be conducted and reported to the satisfaction of the Secretary and linking the submission deadline to the date of commissioning the audit rather than the date of completion

Note: If the condition number varies between approvals the Integra Underground condition is listed first followed by the Integra Open Cut condition in brackets.

Additionally, the Department has recommended that the project approvals include additional contemporary conditions as listed in **Table 3** below.

Table 3: New conditions

Proposed Approvals		Proposed Addition
Aspect	Condition	
Protection of Public Infrastructure	Cdn 13[15] of Sch 2	New standard condition relating to management of public infrastructure damaged by the projects
Water Management Performance Measures	Cdn 30 [35] of Sch 3	New standard condition requiring compliance with newly identified water management performance measures
Exploration Activities and Minor Surface Infrastructure Management Plan	Cdn 41 [X] of Sch 3	New management plan in the Integra Underground approval to ensure that Glencore adequately manages any future minor surface disturbance from exploration activities or construction of minor surface infrastructure (such as gas drainage wells or service boreholes)
Notification of Landowners	Cdn 2 of Sch 4	New standard condition outlining the rights of prospective tenants on mine-owned land with regards to noise and dust
Preparation of Management Plans	Cdn 3 of Sch 5	New condition to ensure that currently approved management plans remain in force until replaced by a plan required to be prepared and approved under the revised consent

Note: If the condition number varies between approvals the Integra Underground condition is listed first followed by the Integra Open Cut condition in brackets.

5.5 Updated Appendices

It is proposed that existing Appendices in the combined project approval are updated to reflect operations to be authorised under each new project approval, as set out below.

5.5.1 Appendix 1 - Schedule of Land

A number of properties have been removed from the Integra Underground Schedule of Land due to decreasing the project area boundary (see **Section 5.5.3** below).

The Schedule of Land for the Integra Open Cut remains largely unchanged. There are some additional lots to account for land sub-divisions. The land subject to the biodiversity offset areas has also been added to the Integra Open Cut Schedule of Land.

5.5.2 Appendix 2 - Previous EAs

It is proposed that references to previous EAs relating to the Camberwell Coal Project (86/2889) and Glennies Creek Open Cut Coal Project (06_0073) are removed from Appendix 2 of the Integra Underground approval but are retained in the Integra Open Cut approval.

It is proposed that references to previous EAs relating to the Glennies Creek Colliery (105/90), Glennies Creek Colliery Surface Facilities (06_0057) and Glennies Creek Underground Coal Project (06_0213) are removed from Appendix 2 of the Integra Open Cut approval but retained in the Integra Underground approval.

5.5.3 Appendix 3 - Project Areas

Glencore has proposed excising a majority of the open cut area from the Integra Underground project boundary (see **Figure 3**). A small overlap in the centre of the Complex, over the underground surface facilities, would remain between the two approvals to facilitate Bloomfield undertaking haulage of Glencore’s underground ROM coal (as discussed in **Section 1.2** above).The overlap covers part of Lot 710 DP 624852 and part of Lot 1 DP 1083482.

Glencore has also proposed excising an area east of Glennies Creek which lies within Coal Lease 382, currently subject to a transfer application from Glencore to Bloomfield.

Bloomfield has proposed a slight change to the Integra Open Cut project boundary to include the eastern extent of TD2 (see **Figure 4**). This area has already been disturbed and the Department understands this occurred during the previous ownership of the Complex. The additional 8 ha area is on land privately owned by Bloomfield which is currently included in the Schedule of Land in Appendix 1 of the consolidated project approval. While the Department is not satisfied with the events that led to the location of the dam in an unauthorised area, the Department is satisfied that no additional impacts would occur from now extending the project boundary to accommodate this area.

All figures throughout the project approval have been updated to reflect the proposed revised project boundaries.

5.5.4 Appendix 5 - Land Ownership Plans & Residential Receivers

Land ownership plans in both approvals have been updated to reflect the revised project boundaries and recent land acquisitions.

5.5.5 Appendix 6 - Alternate Noise Conditions

As discussed in **Section 5.1.1** above, the Department recommends removing the consolidated project approval's Appendix 6 from the Integra Open Cut approval. For the Integra Underground approval, these conditions are proposed to be moved into Schedule 3 and the appendix also deleted.

5.5.6 Appendices 7, 8 and 9

As discussed in **Section 5.3** above, Appendices 7, 8 and 9 of the consolidated project approval are no longer relevant to underground activities and therefore the Department recommends their removal from the Integra Underground approval. The appendices are proposed to be retained in the Integra Open Cut approval and the figures updated to reflect the new project boundaries.

5.5.7 Appendix 10 - Statements of Commitments

The consolidated approval contained separate Statements of Commitments (SoC) for Integra Open Cut and Integra Underground. These commitments have remained largely unchanged. Only minor changes, such as updating Proponent names, have been incorporated in the SoC that is relevant to each of the revised approvals.

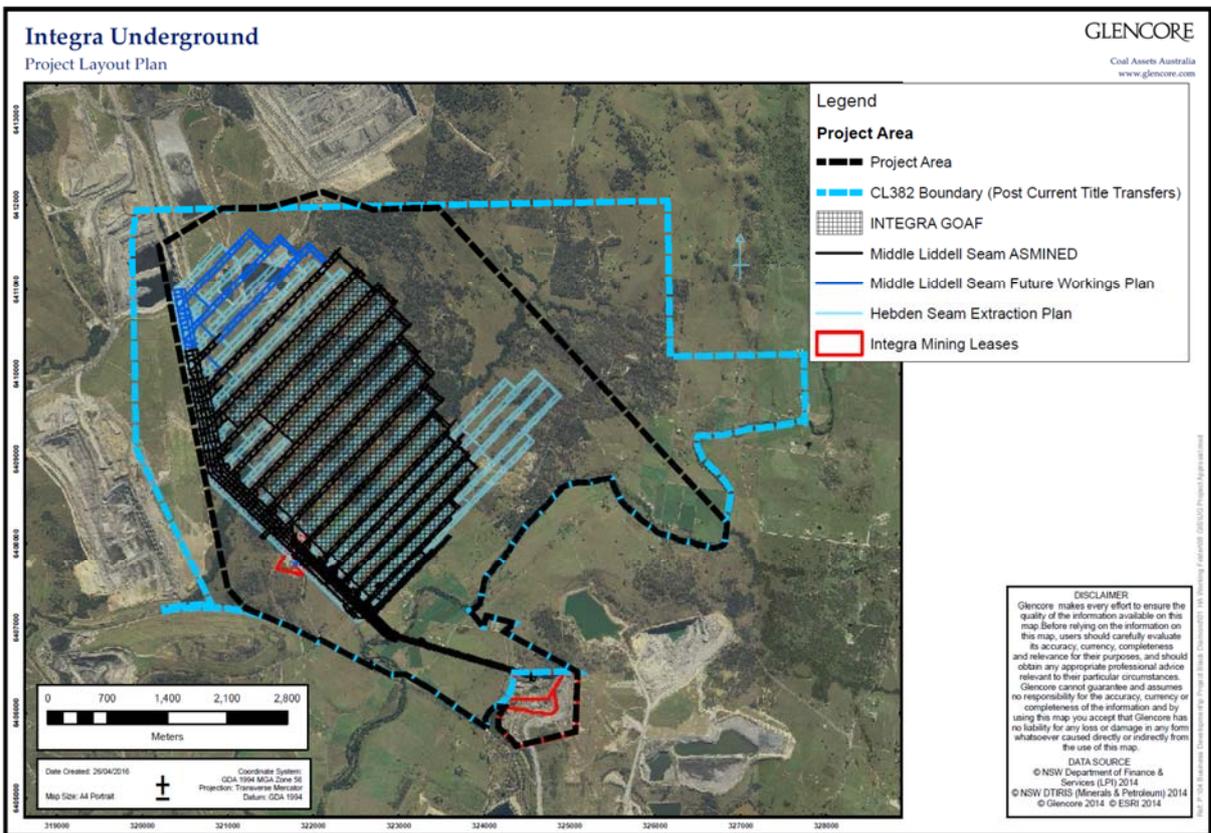


Figure 3: Proposed Integra Underground project boundary

6. CONCLUSION

The Department has assessed the modification applications, EA and agency submissions in accordance with the relevant requirements of the EP&A Act. The proposal would not change the scale or environmental impact of approved activities at Integra Underground or Integra Open Cut.

The modifications would allow mining operations at Integra Underground and Integra Open Cut to be conducted separately. This gives the new owners an opportunity to efficiently manage their individual projects and to create new synergies with their adjacent projects – Glencore’s Mount Owen Complex and Bloomfield’s Rix’s Creek.

Glencore and Bloomfield have not proposed any changes to the approved mining operations or current disturbance areas. Therefore the Department considers there to be no significant change to environmental impacts resulting from the proposal to separate the currently consolidated project approvals.

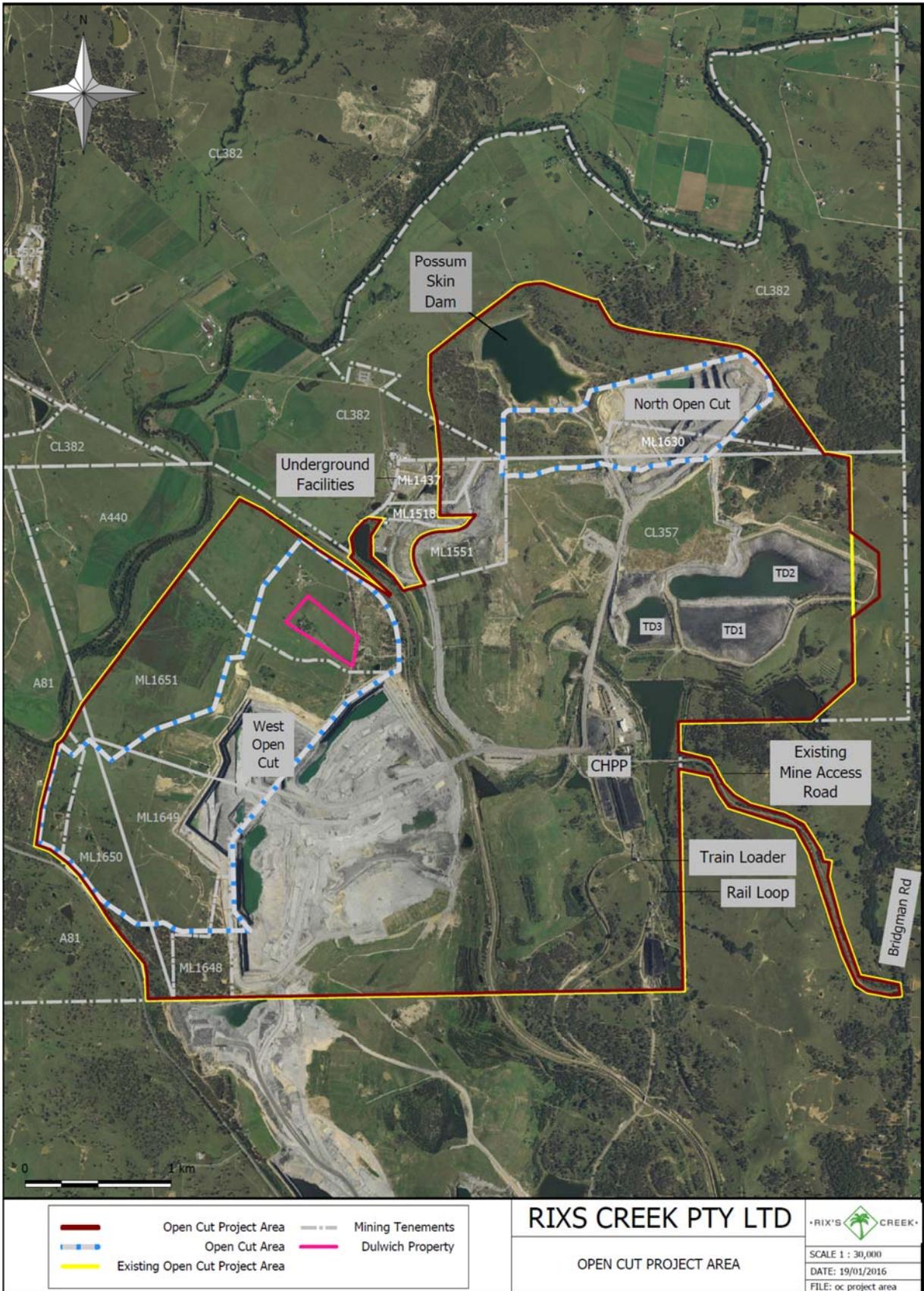


Figure 4: Proposed Integra Open Cut project boundary

The draft NoMs reflect the changes necessary to operationally separate the Integra Open Cut approval from the Integra Underground approval. The Department has given careful consideration to the complexities involved in separating the two approvals, in particular the complexities involved in identifying environmental impacts associated with each project, to ensure that the individual project approvals adequately manage all potential impacts and maintain existing landholder and community rights. The Department has also taken this opportunity to review the approvals and include a fully revised and updated suite of conditions consistent with current practice and contemporary standards.

The Department is satisfied that, with the existing management measures in place, the proposed modifications would result in:

- no material change to currently approved operations at Integra Underground or Integra Open Cut;
- no material change to environmental impacts; and
- benefits through the alignment of the lapse date for mining activities under each approval.

The Department is satisfied that the proposed modifications are in the public interest, and should be approved subject to the recommended conditions of approval.

7. NOTICES OF MODIFICATION

Two Notices of Modification (see **Appendices B and C**) which are, in effect, two complete new project approvals, have been prepared for consideration by the Commission.

Bloomfield and Glencore have both agreed to the proposed modified conditions of consent.

8. RECOMMENDATION

It is RECOMMENDED that the Planning and Assessment Commission, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the modification requests fall within the scope of section 75W of the EP&A Act;
- **approves** the modification applications MP 08_0101 MOD 5 and MP 08_0102 MOD 6, under section 75W of the EP&A Act; and
- **signs** the attached notices of modification (**Appendix B**).

Megan Dawson 9.8.16

Megan Dawson
Planning Officer, Resource Assessments

Howard Reed
 9.8.16

Howard Reed
Director, Resource Assessments

Oliver Holm 11/8/16

Oliver Holm
**Executive Director
 Resource Assessments & Compliance**

APPENDIX A: ENVIRONMENTAL ASSESSMENT

See the Department's website at www.majorprojects.planning.nsw.gov.au

APPENDIX B: NOTICE OF MODIFICATION (INTEGRA UNDERGROUND)

APPENDIX C: NOTICE OF MODIFICATION (INTEGRA OPEN CUT)
