

## ASSESSMENT REPORT

### Glendell Coal Mine – Transmission Line Relocation (DA 80/952 MOD 3)

#### 1. BACKGROUND

Glendell Open Cut Coal Mine (Glendell Mine) is located approximately 20 kilometres (km) north-west of Singleton in the Upper Hunter Valley (see **Figure 1**). The mine is owned and operated by Mt Owen Pty Limited, a wholly owned subsidiary of Glencore Coal Pty Limited (Glencore). Glencore manages the Glendell Mine as part of the Mt Owen Complex, which also includes the Mt Owen and Ravensworth East open cut coal mines.



**Figure 1: Location of Glendell Mine**

The Glendell Mine was approved by the then Minister for Planning and Environment on 2 May 1983, following a Commission of Inquiry. The consent has since been modified on two occasions, in 1997 and 2008. Mining operations commenced in 2008 and Glendell Mine is currently approved to produce 4.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until 2024.

## 2. PROPOSED MODIFICATION

### 2.1.1 Justification

Glencore is seeking to modify DA 80/952 a third time, under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The purpose of the modification is to relocate a 2.7 kilometre (km) section of an Ausgrid 132 kilovolt (kV) electricity transmission line approximately 500 metres (m) to the west, away from the active mining area. The relocation is required to protect public utility infrastructure, and to facilitate the safe and efficient continuation of approved mining activities at Glendell Mine.

Condition 8 of the original development consent permitted the relocation of existing on-site electrical transmission lines affected by the development works. However, Glencore identified that it did not anticipate having to relocate the transmission line during the assessment of modification 2 to the development consent and this condition was removed. Since then, Glencore has implemented a self-imposed 200 m buffer between mining activities and the transmission line to minimise blasting impacts.

The progression of mining has now reached a stage where operations are necessary within this 200 m buffer and therefore Glencore is seeking to relocate the affected section of transmission line. There are no changes proposed to any other aspect of the approved mining operations, including mining methods, mining areas, hours of operation and extraction quantities.

The proposed modification is described further in the Environmental Assessment (EA, see **Appendix A**), prepared by Hansen Bailey, which accompanied the application.

### 2.1.2 Proposed Alignment

The proposed alignment for the new section of the transmission line is located on land owned and managed by Glencore and is within the consent boundary, but outside of the currently approved disturbance boundary for the Glendell Mine (see **Figure 2**). The alignment generally runs north-south, parallel to the Narama Pipeline and crosses both Bowmans Creek and Swamp Creek on two occasions.

The land is zoned as RU1 primary production under the *Singleton Local Environmental Plan 2013* and is currently used for grazing. The proposed easement for the transmission line is primarily covered with derived grassland, with some remnant and regrowth woodlands along the watercourses.

The alignment was selected in consultation with Ausgrid. In addition to geotechnical requirements and powerline design standards, the proposed alignment considered and endeavoured, where possible, to avoid:

- identified mineable coal reserves and potential future mining areas;
- Bowmans Creek, Swamp Creek and associated waterfront land;
- sensitive archaeology areas and heritage items;
- native vegetation; and
- existing infrastructure (eg New England Highway, Main Northern Railway and the Narama Pipeline).

Glencore are aiming to commence work on the realignment as soon as possible and the work is expected to take approximately four months to complete. The realigned section of transmission line would continue to be a single pole overhead line requiring the installation of 13 new steel power poles. Once the new line is connected, the redundant line would be removed and the land rehabilitated.

Glencore would be responsible for constructing the new transmission line and decommissioning the old line. Once commissioned, Ausgrid would take over ownership of the new line and ongoing management would fall under Ausgrid's discretionary processes and guidelines. The redundant easement would also be extinguished from the land titles and the new easement and right of ways would be registered with the NSW Land & Property Information.

Approximately 2.9 km of existing access tracks may require minor upgrades (grading or widening) and approximately 2.3 km of new tracks may be constructed to facilitate construction and maintenance of the new transmission line.

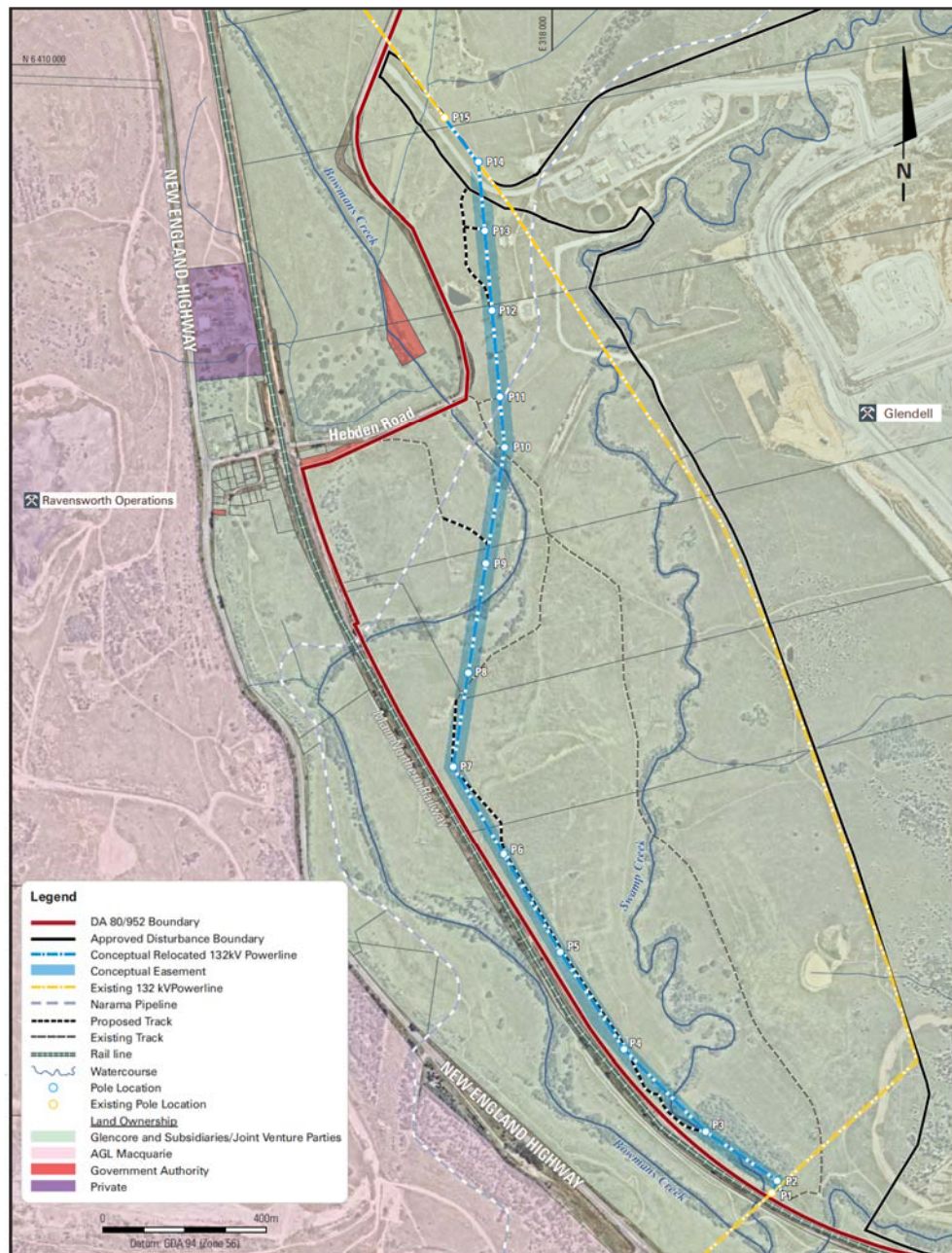


Figure 2: Proposed transmission line alignment

### 3. STATUTORY CONTEXT

#### 3.1 Section 75W

Glendell Mine was approved under Part 4 of the EP&A Act. In accordance with Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and the transitional arrangements under Schedule 6A of the EP&A Act, the modification is to be determined under the former section 75W of the EP&A Act.

The Department notes that the proposed modification is of a minor nature and would not result in any major changes to the approved operations at Glendell Mine. The Department is therefore satisfied that the proposed modification is within the scope of section 75W, and may be determined accordingly.

#### 3.2 Commonwealth Approval

Glencore did not refer the modification to the Commonwealth Department of Environment and Energy, under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), as it considers that it would not significantly impact on matters of national environmental significance.



### 3.3 Other Licences

Mining activities at Glendell Mine are also regulated under an Environmental Protection Licence (EPL 12840) granted under the *Protection of the Environment Operations Act 1997* and seven leases granted under the *Mining Act 1992*. The proposed alignment is located entirely within coal lease CL0358. No changes to these licences/leases are likely to be required.

### 3.4 Approval Authority

The Minister for Planning is the approval authority for the proposed modification. Under the Minister's delegation of 14 September 2011, the Planning Assessment Commission must determine the application, as Glencore has declared political donations by an affiliated company, Glencore Australia Holdings Pty Limited.

### 3.5 Environmental Planning Instruments

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

- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*;
- *State Environmental Planning Policy (State and Regional Development) 2011*;
- *Singleton Local Environmental Plan 2013*; and
- *Hunter Regional Environmental Plan 1989*.

The Department has considered the modification against the relevant provisions of these EPIs, as well as Glencore's consideration of these matters. Based on this assessment, the Department considers that the proposed development can be undertaken in a manner that is generally consistent with the aims, objectives and provisions of the EPIs.

## 4. CONSULTATION

Due to the minor nature of the proposed modification, the Department considered that public exhibition was not required. However, the application and supporting EA were placed on the Department's website and comments were sought from Singleton Shire Council (Council), the Environmental Protection Authority (EPA), Division of Resources and Energy of the Department of Industry (DRE), Department of Primary Industries (DPI), Office of Environment and Heritage (OEH), Heritage Division of OEH, Australian Rail Track Corporation (ARTC) and Ausgrid.

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

## 5. SUBMISSIONS

The Department received six submissions from government agencies and two submissions from state-owned infrastructure companies (see **Appendix B**). Glencore provided a Response to Submissions (RTS) document to address concerns raised in these submissions (see **Appendix C**). A summary of the issues raised and Glencore's response is provided below.

**Council** considered the proposal to be minor and had no objections or comments on the modification.

**EPA** did not have any specific comments or proposed conditions on the modification.

**DRE** noted that the transmission line relocation would not change the mine design, the conceptual final landform design, rehabilitation objectives or domains, as described in the approved Mining Operations Plan (MOP). DRE requested that the proposed alignment, if approved, should be identified on the MOP plans. In the RTS, Glencore committed to updating the MOP plans and the Department has recommended that this be added add the Statement of Commitments (SoC) in Appendix 3 of the consent.

**DPI** provided comments on the proposed activities within waterfront land, management of riparian vegetation, potential impacts to groundwater and the route selection.

Having regard to the potential disturbance to riparian vegetation, DPI recommended that DPI Water's *Guidelines for Controlled Activities on Waterfront Land* be considered for any activities on waterfront land. DPI also recommended that the Biodiversity Management Plan (BMP) be updated to include appropriate riparian revegetation and rehabilitation. In the RTS, Glencore committed to following DPI Water guidelines and to updating the Mt Owen Complex BMP, which incorporates Glendell Mine's biodiversity management and offset strategy requirements under the Rehabilitation and Offset Management Plan. The Department's consideration of biodiversity impacts is set out in **Section 6.1** below.

DPI also requested additional justification be provided for the selected alignment. In the RTS, Glencore provided additional information on how the preferred alignment was selected and what alternatives were considered. Following review of the RTS, DPI made no further comment on the route selection.

Lastly, DPI requested that if groundwater is intercepted during the proposed works, that DPI Water be notified immediately. In the RTS, Glencore committed to this procedure and the Department has recommended that this be added to the SoC in Appendix 3 of the consent.

**OEH** provided comments on Aboriginal cultural heritage, threatened species and riparian vegetation. OEH was satisfied with the proposed Aboriginal cultural heritage management measures and the proposed vegetation mitigation measures and offsets. OEH recommended conditions of consent to address its concerns regarding rehabilitation objectives, pre-clearance biodiversity surveys and thresholds for compensatory planting.

In the RTS, Glencore noted OEH's comments and committed to undertaking a threatened species survey prior to commencing any construction works. Glencore also committed to updating the Mt Owen Complex BMP to reflect the proposed mitigation measures and to undertaking like-for-like rehabilitation to ensure that revegetation species are consistent with those being disturbed.

Following review of the RTS, OEH made no further comment on these matters. The Department's assessment of biodiversity and Aboriginal cultural heritage impacts are set out in **Sections 6.1** and **6.2** below, respectively.

The **Heritage Division** noted that no items of state heritage significance would be affected by the proposed relocation works and that it did not object to the modification. However, the Heritage Division did recommend that if any significant historic archaeological relics are uncovered during the construction phase, Glencore should adjust its operations to minimise harm to such relics. Glencore noted these recommendations in the RTS. The Department's consideration of heritage impacts is set out in **Section 6.3** below.

**ARTC** had no objection to the proposal. ARTC stated it will continue to liaise with Glencore regarding the overhead crossing of the Main Northern Railway and provided design requirements for this crossing. The Department has proposed a condition of consent to ensure any aspect of the transmission line that occurs near the Main Northern Railway corridor is designed and constructed to the satisfaction of ARTC.

**Ausgrid** provided comments on asset ownership, operation and maintenance; and raised a number of concerns regarding the level of detail of environmental and ecological review provided in the EA. The Department understands that Glencore, and its consultants, met with Ausgrid to discuss and resolve these issues.

In its submission, Ausgrid reiterated that the new transmission line would become an Ausgrid asset, once completed, and as such construction, operation and maintenance of the line would be carried out under the *Electricity Supply Act 1995*. Glencore noted this advice in the RTS, and the Department agrees that no further consideration is required.

Ausgrid requested additional information be provided on the suitability of the proposed right of ways (access tracks) and their impact on Swamp Creek, as well as the appropriateness of the proposed pole locations in proximity to Bowmans Creek and Swamp Creek. In the RTS, Glencore provided additional justification for the pole locations and revised the proposed access tracks to ensure 24/7 all-weather access. Following review of the RTS, Ausgrid made no further comment on the positioning of the proposed infrastructure. The Department understands that Glencore would continue to liaise with Ausgrid on the final design of the transmission line and has proposed a condition of consent to ensure the transmission line is designed and constructed to the satisfaction of Ausgrid.

Ausgrid also requested clarification on the environmental approvals and environmental management responsibilities, particularly the relationship between Ausgrid's environmental self-approval arrangements and the Glendell Mine's conditions of consent. In the RTS, Glencore provided additional information on the permissibility of the works under its consent, if approved. Glencore also clarified that operation and maintenance of the line would be managed by Ausgrid under their Environmental Management System.

Ausgrid also suggested that a detailed ecological assessment be undertaken to better understand the possible impacts to threatened species and overall sensitive features. OEH provided similar advice, and in response, Glencore committed to undertaking a threatened species survey prior to commencing works associated with this modification. Following review of the RTS, Ausgrid made no further comment on these matters. The Department's consideration of this matter is set out in the **Section 6.1.3** below.

## 6. ASSESSMENT

The Department 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:

- modification application and accompanying EA;
- relevant content of previous EAs, current environmental management plans and monitoring results;
- submissions received and the RTS;
- conditions of consent, as amended by subsequent modifications; and
- relevant environmental planning instruments, policies and guidelines.

The Department considers the key issues associated with the proposed modification to be biodiversity, heritage, water and environmental management.

### 6.1 Biodiversity

#### 6.1.1 Predicted Impacts

The EA relied on OEH's Atlas of NSW Wildlife and the 2007 ecological impact assessment for modification 2 to assess the biodiversity impacts related to this proposal. The proposed realigned transmission line would result in approximately 2.83 hectare (ha) of additional vegetation disturbance. The expected disturbance by vegetation community and type is tabulated in **Table 1** below. None of the vegetation communities are listed as Endangered Ecological Communities (EEC) under the *Threatened Species Conservation Act 1995* (TSC Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The vegetation disturbance is classified as being either direct or indirect, and temporary or permanent. Direct disturbance is considered to be vegetation that is fully cleared to the ground surface whereas indirect disturbance is partial vegetation clearance, such as cutting or lopping of tree branches. Temporary disturbance would be rehabilitated immediately following construction, as opposed to permanent disturbance which would be land cleared for the foreseeable future.

A majority of the proposed alignment and pole placements cover derived grassland, however due to the proximity of the alignment to Bowmans Creek and Swamp Creek there would be approximately 2.05 ha of indirect temporary disturbance to two Oak Forest communities, particularly near the creek crossings. This disturbance would be necessary for operations to maintain safe clearances between trees and the transmission line for fire protection, public safety and to ensure undisrupted power supply.

Construction related disturbance would largely be from the installation of the 13 new power poles and from stringing the conductor wires. This construction would temporarily disturb approximately 0.06 ha of vegetation per pole, meaning that around 0.7774 ha of vegetation would be temporarily and directly disturbed as part of the modification. However, only 0.0026 ha of vegetation would be permanently and directly disturbed.

**Table 1:** Summary of vegetation disturbance

Vegetation Community	Pole Number	Total Disturbance Type		
		Temporary		Permanent
		Direct	Indirect	Direct
Derived Grassland	P4 – P14 (11 poles)	0.6596	0	0.0004
Central Hunter Swamp Oak Forest	P2, P3 (2 poles)	0.1178	1.4	0.0022
Hunter Valley River Oak Forest	None		0.65	
<b>Total</b>		<b>0.7774</b>	<b>2.05</b>	<b>0.0026</b>

Disturbance associated with new or upgraded access tracks/service roads for the relocation of the transmission line was not quantified in the EA, however it is expected to be minimal.

The EA also identified that while two threatened flora species (*eucalyptus camaldulensis* and *acacia pendula*) listed under the TSC Act and four aquatic habitats are known to occur in proximity to the proposed easement, Glencore has proposed to avoid these locations. Consequently, the EA concluded that there would be no significant impact to threatened flora or fauna species or aquatic habitats.

#### 6.1.2 Proposed Offsets

To offset the vegetation disturbance associated with the modification, Glencore has proposed to establish an additional 4 ha conservation area and to undertake compensatory planting. The proposed 4 ha on-site

conservation area has been selected adjacent to Glendell Mine's existing Bettys Creek Habitat Management Area (HMA). The area would be amalgamated with the HMA and managed collectively.

Due to the minor amount of vegetation disturbance and having considered the similar ecological values between the land being cleared and the land being offset, both OEH and the Department consider the proposed offset area to be acceptable and appropriate. The Department has reflected this by increasing the size of the HMA offset strategy size in the consent by 4 ha to 174 ha, and included a revised figure for the Offset Strategy Plan in Appendix 5 of the consent. The Department has also reflected Glencore's commitment to update the Mt Owen Complex BMP in the SoC in Appendix 3 of the consent.

In addition to the establishing the 4 ha offset area, Glencore has proposed to undertake compensatory planting for any mature River Oak tree that is removed from between poles P9 - P11 along Bowmans Creek at a ratio of 10:1 and erect compensatory nesting boxes for any tree hollow that is removed at a ratio of 2:1.

The Department is satisfied with this approach, given that the disturbance area is known and the biodiversity impacts are considered to be minor, but considering that the exact number of mature trees/tree hollows to be destroyed is unknown. However, the Department considers that the above compensation commitment should not be limited to disturbance along Bowmans Creek, but instead should be applied to any mature River Oak tree that is removed due to the modification. The Department has therefore proposed a new condition requiring Glencore to plant and maintain, until established, 10 River Oak trees for every established River Oak tree that is removed or severely damaged during construction and maintenance of the realigned transmission line; and to erect 2 nesting boxes for every identified tree hollow that is removed or severely damaged during construction and maintenance of the realigned transmission line. Further, following OEH's advice the definitions of "established" and "removed or severely damaged" have been added as notes below the conditions to clarify when the compensation commitment is triggered.

Glencore has also committed to undertaking a due diligence assessment of each established River Oak tree to be lopped, prior to disturbance. The Department is satisfied with this commitment to ensure adequate identification of established River Oak trees before they are removed and has reflected this commitment in the recommended SoC in Appendix 3 of the consent.

### **6.1.3 Proposed Avoidance, Mitigation and Management**

Glencore, in consultation with Ausgrid, designed the alignment of the new transmission line to avoid threatened species, EECs and aquatic habitats. To further minimise biodiversity impacts, Glencore has proposed to conduct pre-clearance surveys and to implement specific riparian vegetation and rehabilitation management measures.

#### Pre-clearance survey

Consistent with agency comments in **Section 5** above and Glencore's commitments made in the EA and RTS, the Department agrees that a pre-clearance survey would be necessary prior to commencing any disturbance related to this proposal, including for access tracks. Reliance on the 2007 study is acceptable at the conceptual easement planning stage, however further on-ground threatened species surveys should be conducted to validate this earlier work and ensure there are no threatened species present, prior to construction.

While the Department acknowledges that the existing Rehabilitation and Offset Management Plan includes procedures for undertaking pre-clearance surveys, it considers that a new condition of consent is warranted to govern these specific surveys. The recommended condition requires that Glencore engage a suitably qualified expert to undertake a pre-clearance threatened species survey prior to commencing any surface disturbance related to construction or maintenance of the realigned transmission line.

Should the pre-clearance surveys identify any additional threatened species that would be adversely impacted by the project, Glencore would be required to provide further offsets to account for this impact in accordance with OEH's *NSW Biodiversity Offsets Policy for Major Projects*.

#### Riparian vegetation

Due to the proximity of the proposed transmission line to Bowmans Creek and Swamp Creek there would be some indirect disturbance to riparian vegetation on waterfront land (land within 40 m of a high bank of a watercourse). In the EA, Glencore stated that any tree lopping required along Bowmans Creek and Swamp Creek in the riparian zone would be undertaken manually by chainsaw (on foot or by the use of cherry picker man lifts) so that no heavy machinery traverses the creek beds and to allow the root structures to remain in situ.

In addition to the proposed maintenance measures in the EA, vegetation maintenance would be undertaken by Ausgrid generally in accordance with Ausgrid's Overhead Design Manual, NEG-OH21 Vegetation Safety Clearances and DRE's 2005 ISSC3 Guideline for Managing Vegetation Near Power Lines.

DPI also recommended that DPI Water's *Guidelines for Controlled Activities on Waterfront Land* be considered for any works within waterfront land. Accordingly, the Department has recommended that the Rehabilitation and Offset Management Plan requirements in the consent be revised to include a description of riparian revegetation and maintenance works, in accordance with DPI Water guidelines.

The Department is satisfied that the proposed maintenance measures and additional adherence to Ausgrid, DRE and DPI Water guidelines are adequate to minimise impacts to the sensitive riparian zone.

Further discussion on water related impacts associated with the proposed activities on waterfront land are addressed in **Section 6.4** below.

The Department notes that DPI also recommended that the total area of removed riparian vegetation be offset via revegetation works with riparian corridor widths in line with DPI Water guidelines. The Department considers that the proposed 4 ha land-based offset, compensatory planting and the rehabilitation requirements are sufficient to offset the potential impacts to the riparian zone and no further offsets are required.

#### Rehabilitation

Glencore has proposed to continue to manage rehabilitation according to the approved Mt Owen Complex Landscape Management Plan (LMP), which incorporates Glendell Mine's rehabilitation requirements under the Rehabilitation and Offset Management Plan, and the MOP. In the RTS, Glencore clarified that it would rehabilitate the land temporarily cleared for construction of the transmission line as soon as practicable following the completion of construction activities. Similarly, rehabilitation of the redundant section of transmission line would also commence as soon as practicable following decommissioning of the old line. Rehabilitation procedures would generally consist of removing waste and unused equipment, replacing disturbed soil and reseedling.

The Department is satisfied that the proposed rehabilitation is adequate considering the level of disturbance, but that additional information should be provided in the Rehabilitation and Offset Management Plan to address these specific activities. The Department has therefore recommended revising the Rehabilitation and Offset Management Plan requirements in the consent to include a description of revegetation and rehabilitation measures that would be implemented during the construction and maintenance of the realigned transmission line.

The Department has also proposed a new condition requiring Glencore to progressively rehabilitate the site as soon as reasonably practicable following disturbance. This condition would apply to all approved activities under the consent to ensure that all reasonable and feasible measures are taken to minimise the total area exposed for dust generation at any time.

Lastly, OEH recommended that the 0.1178 ha of temporary direct disturbance to the Central Hunter Swamp Oak Forest community, associated with the construction of the transmission line, be replanted or naturally regenerated with a suitable mix of canopy, mid-storey and groundcover species to ensure a rehabilitated forest is established within 20 years. The Department agrees with this suggestion and has reflected this in the recommended conditions.

The Department considers that the proposed management measures are sufficient to minimise impacts to biodiversity.

#### Environmental Management Responsibilities

Once commissioned the relocated transmission line would be owned and maintained by Ausgrid as part of the NSW electricity distribution network. The ongoing environmental management of the line would fall under Ausgrid's Environmental Management System.

Glencore's environmental responsibilities would therefore only cover the construction of the new line and decommissioning of the old line. These activities would be undertaken under Mt Owen's Environmental Management System, and supporting management plans, as required to be updated. The Department acknowledges that there is a clear handover point and distinction of responsibilities between Glencore and Ausgrid, except with respect to ongoing maintenance of vegetation along the easement.



Glencore would be required to undertake compensatory planting where any mature River Oak tree is lopped to the extent that it is severely damaged (a severely damaged tree is considered to be one that is lopped to the extent that half or more of the crown biomass is lost) and erect compensatory nesting boxes for any tree hollow that is removed (see **Section 6.1.3** above). Glencore would also be responsible for completing revegetation and rehabilitation measures along the easement.

However, as Ausgrid would be undertaking the clearance activities, Glencore must ensure that Ausgrid is aware of Glencore's consent requirements. Nevertheless, it remains Glencore's responsibility, over the life of the development, to undertake due diligence assessments before significant tree lopping occurs to appropriately identify when the compensation requirement is triggered.

## **6.2 Aboriginal Cultural Heritage**

### **6.2.1 Predicted Impacts**

The EA included an Aboriginal cultural heritage due diligence assessment, undertaken by OzArk Environmental and Heritage Management Pty Limited (OzArk) in July 2015. This assessment found that one registered site, being MOCO OS-10 (AHIMS ID 37-3-1198) a low-density artefact scatter, is located within the proposed transmission line easement. The cultural, aesthetic and historical value of MOCO OS-10 was previously assessed in the Mount Owen Continued Operations Aboriginal Archaeological Values Assessment by OzArk in October 2014. As with several other sites at the Mt Owen complex MOCO OS-10 has high cultural values as an indicator of past Aboriginal occupation, but low aesthetic values and archaeological significance.

During the visual inspection of the proposed transmission line alignment, an additional 6 'potential archaeologically sensitive areas' were identified in the vicinity of the easement. These sensitive areas or landforms have the potential to contain subsurface artefacts, however due to poor ground surface visibility during the inspection, their sensitivity is uncertain.

### **6.2.2 Proposed Avoidance, Mitigation and Management**

Glencore has proposed to avoid MOCO OS-10 and the 6 sensitive areas. MOCO OS-10 would be further protected by temporary fencing or a similar barrier and the workforce would be informed of its location to ensure the site is not accidentally disturbed.

If Glencore becomes unable to avoid the 6 sensitive areas, further investigations would be undertaken prior to disturbance to ensure the areas do not contain sites of Aboriginal heritage significance. Additional investigations would include test excavations in accordance with OEH's *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

Should any additional unidentified Aboriginal archaeological sites be located during operations, Glencore would follow the existing unanticipated finds protocol in Glendell Mine's approved Aboriginal Cultural Heritage Management Plan.

The Department considers that the proposed management measures are sufficient to minimise impacts to Aboriginal cultural heritage, however the Department has proposed that the requirements of the Aboriginal Cultural Heritage Management Plan be updated to address the additional 6 sensitive areas, until they are further investigated.

## **6.3 Historic Heritage**

### **6.3.1 Predicted Impacts**

To assess the historic heritage impacts related to this proposal, the EA relied on a previous historic heritage impact assessment undertaken by Umwelt in 2007 for modification 2. Since then, Glencore also prepared an archival record of the heritage items identified in 2007, these include items within and surrounding the approved disturbance boundary. Three of the registered items (1, 7 and 8) are located near the proposed realigned transmission line, however only two sub-items (7g and 8b) are located within 50 m and have the potential to be impacted. Sub-item 7g is yards in a paddock from the ruins of the former Marali Homestead. Sub-item 8b includes two sheds from the former Hillview Homestead. Both sub-items have local heritage significance, however as they are standing structures they are not protected by the relic's provisions under Section 139 of the *Heritage Act 1977*.

No items of state heritage significance were identified in the vicinity of the proposed transmission line.

### 6.3.2 Proposed Avoidance, Mitigation and Management

Glencore has proposed to avoid sub-item 7g by identifying it in the field to ensure it is not disturbed. One of the sheds associated with sub-item 8b would be manually dismantled, with salvaged materials removed from site. The other less dilapidated shed would be retained and avoided.

Considering the low risk, Department is satisfied with Glencore's proposed management measures to avoid sub-item 7g and the standing shed associated with sub-item 8b. The Department also considers it acceptable to remove the dilapidated shed associated with sub-item 8b. The Department recommends that the above management measures are added to the SoC in Appendix 3 of the consent.

No further conditions or amendments are considered necessary.

## 6.4 Water

As described in the EA and RTS, the proposal is unlikely to result in any significant water impacts to the site. However, as the proposed alignment is located near and crosses Bowmans Creek and Swamp Creek there is an increased potential for erosion associated with working in the sensitive riparian zone, particularly from clearing of vegetation for installing power poles and creating access tracks.

To manage surface water run-off, Glencore would continue to undertake activities in accordance with OEH's publication *Managing Urban Stormwater: Soils and Construction - Volume 1 and Volume 2E Mines and Quarries* and its approved Erosion and Sediment Control Plan, which is currently incorporated in the Mt Owen Complex plan. Glencore has also committed to implementing suitable erosion and sediment controls prior to the commencement of works on waterfront land, to minimise the potential for inadvertent impacts to local water resources.

The Department is satisfied that the existing and proposed management measures would be sufficient to minimise surface and groundwater impacts, but considers that the conditions of consent should be strengthened. Following DPI's advice, the Department has proposed a new condition requiring Glencore to design, install and maintain any infrastructure within 40 m of a watercourse generally in accordance with DPI Water's *Guidelines for Controlled Activities on Waterfront Land*. The Department has also proposed a minor revision to the Erosion and Sediment Control Plan requirements to ensure it addresses activities on waterfront land.

## 6.5 Other impacts

Other minor impacts to noise, air quality, traffic, visual amenity and socio-economics are discussed in **Table 2** below.

**Table 2:** Other impacts

Issue	Impact and Consideration	Recommendation
Noise	<ul style="list-style-type: none"> <li>Construction of the new transmission line and decommissioning of the redundant transmission line could potentially increase construction noise emissions from site.</li> <li>However, considering that the nearest sensitive receiver is located at least 2.3 km to the south, in the village of Camberwell, the Department considers these increases to be minor and unlikely to be discernible relative to the existing approved operations.</li> <li>The Department is satisfied that the proposed modifications would not increase operational noise emissions from the sites or impact the amenity of nearby residents.</li> </ul>	To ensure that construction noise is minimised, the Department has proposed a new condition requiring Glencore to undertake construction activities in accordance with the <i>Interim Construction Noise Guideline</i> .
Air quality	<ul style="list-style-type: none"> <li>The proposed construction activities, particularly the associated vehicle movements on dirt access tracks, have the potential to increase dust emissions from site.</li> <li>However, the Department considers these additional air quality impacts would be minor and unlikely to be discernible relative to the existing approved operations.</li> <li>The existing air quality criteria and management plan requirements would be adequate to ensure dust emissions from this modification are minimised.</li> </ul>	<p>To ensure air quality impacts are appropriately managed, the Department has recommended an update to the existing conditions to reflect the requirements of current Government policy in regards to air quality.</p> <p>This update does not alter any existing landowner rights, but provides clarity around any future acquisition and/or mitigation processes.</p>

<i>Issue</i>	<i>Impact and Consideration</i>	<i>Recommendation</i>
		No further additional conditions or amendments are considered necessary.
<i>Traffic</i>	<ul style="list-style-type: none"> <li>Construction vehicles would primarily use the main Glendell Mine entry of Hebden Road or existing mine access tracks.</li> <li>The additional traffic associated with these works would be minimal when compared to existing traffic associated with Glendell Mine.</li> </ul>	No additional conditions or amendments are considered necessary.
<i>Visual Amenity</i>	<ul style="list-style-type: none"> <li>As the proposed new transmission line is located entirely within Glendell Mine's approved consent boundary on mine-owned land, and the nearest private receiver is located at least 2.3 km away, the Department considers that there would be no significant change to visual amenity impacts.</li> </ul>	No additional conditions or amendments are considered necessary.
<i>Socio-economic</i>	<ul style="list-style-type: none"> <li>The modification is required to ensure the electricity distribution network is undisturbed by blasting impacts from Glendell Mine's mining operations.</li> <li>The transmission line relocation would also allow Glencore to maximise coal extraction from the western extent of Glendell Mine's approved mining area.</li> <li>The proposed activities would create 6 construction jobs.</li> </ul>	No additional conditions or amendments are considered necessary.

## 7. CONCLUSION

The Department has completed its assessment of the proposal, including consideration of the potential environmental, social and economic impacts and the relevant requirements of the EP&A Act.

Glencore is seeking to relocate a 2.7 km section of Ausgrid-owned transmission line away from the expanding Glendell Mine to minimise blasting impacts to the transmission line. The Department considers the proposed relocation is justified and the Department is satisfied that the proposed realignment has been appropriately selected to minimise potential ecological and archaeological impacts.

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

- no material change to currently approved operations at Glendell Mine;
- no material change to approved environmental impacts; and
- long-term socio-economic benefits associated with a safe and uninterrupted electricity supply.

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

If approved, the Department understands that Glencore and Ausgrid must still agree to a final design, sign a Connection Contract and Deed of Agreement for Easement prior to commencing the proposed activities.

## 8. RECOMMENDED CONDITIONS

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

To facilitate the relocation of the transmission line the Department has proposed a new condition in Schedule 2 requiring Glencore to relocate the affected transmission line to a new alignment to the satisfaction of Ausgrid, prior to mining within 200 metres of the existing electrical transmission line. The Department has also proposed a new figure for the Development Layout Plan in Appendix 2 that shows the new conceptual alignment of the transmission line.

In addition to the proposed conditions described in **Sections 5** and **6**, the Department has taken the opportunity to review the overall consent and update a number of conditions to reflect current practice and contemporary standards. These include:

- updating definitions to reflect current agency names and terminology;
- replacing the word 'shall' with 'must';
- adding standard administrative conditions for demolition and protection of public infrastructure;
- updating agency references to reflect current agency responsibilities;
- providing additional clarification in the blasting and noise conditions;

- updating air quality conditions in regards acquisition and/or mitigation requirements, to reflect current Government policy in regards to air quality;
- updating the conservation bond condition to consider calculations and three yearly reviews;
- providing for management plans to be prepared and then 'implemented from time to time as required by the Secretary';
- revising Schedule 5 environmental management, monitoring, auditing and reporting conditions;
- improving consistency with the nearby Mt Owen conditions of consent.

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


## 9. RECOMMENDATION

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

- **considers** the findings and recommendations of this report, noting that the Department considers that the modification is approvable, subject to conditions;
- **determines** that the proponent's request is a modification under section 75W of the EP&A Act; and
- if the Commission determines to modify the approval, **signs** the attached notice of modification (**Appendix D**).

  
17/11/2016

Matthew Spratt  
Team Leader  
Resource Assessments

  
17/11/16  
Oliver Holm  
Executive Director  
Resource Assessments and Compliance

## APPENDIX A: ENVIRONMENTAL ASSESSMENT

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See the Department's website at [www.majorprojects.planning.nsw.gov.au](http://www.majorprojects.planning.nsw.gov.au)



## APPENDIX B: SUBMISSIONS

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See the Department's website at [www.majorprojects.planning.nsw.gov.au](http://www.majorprojects.planning.nsw.gov.au)

## APPENDIX C: RESPONSE TO SUBMISSIONS

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See the Department's website at [www.majorprojects.planning.nsw.gov.au](http://www.majorprojects.planning.nsw.gov.au)

## **APPENDIX D: NOTICE OF MODIFICATION**

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## **APPENDIX E: CONSOLIDATED CONSENT**

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