

ASSESSMENT REPORT

Sunrise Project (formerly Syerston Project)

Accommodation Camp Modification (DA 374-11-00 – MOD 6)

EXECUTIVE SUMMARY

The Sunrise Project is an approved open cut nickel-cobalt-scandium mine located approximately 4.5 kilometres (km) northwest of Fifield in the Central West Region of NSW. Scandium21 is seeking to modify the development consent for the Sunrise Project to relocate the accommodation camp from the mine site to a property 4 km south of the mine and increase its capacity.

The Department publicly exhibited the application from 23 January 2018 to 7 February 2018. The Department received three public submissions objecting to the proposal as well as advice from six government agencies, none of which objected to the proposed modification.

The key issue for consideration is the potential traffic impacts on local roads between the camp and the mine site. The Department notes that Scandium21 has reached an agreement with Lachlan Shire Council regarding the upgrade and maintenance of these roads, and the Department is satisfied that this agreement would adequately mitigate any potential traffic impacts.

The proposed modification would not result in any significant environmental impacts beyond those assessed and approved for the original project, and importantly, it would facilitate the development of the project with its associated socio-economic benefits, including capital investment of US\$784 million and employment of up to 300 people during operations. Consequently, the Department considers the proposed modification is in the public interest and should be approved, subject to conditions.

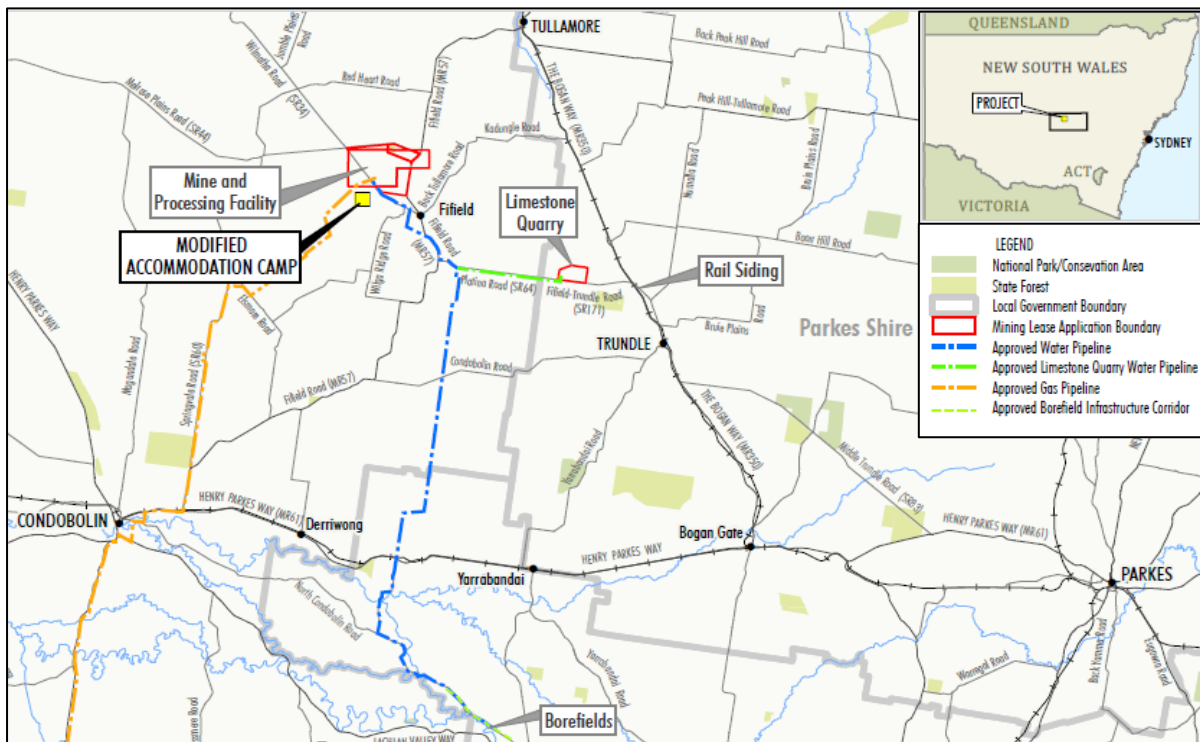


Figure 1: Project Location and Proposed Modification

1 BACKGROUND

The Sunrise Project is an approved open cut nickel-cobalt-scandium mine located approximately 4.5 km northwest of Fifield and 45 km north east of Condobolin in the Lachlan Shire local government area (see **Figure 1**). The Sunrise Project is owned and operated by Scandium21, a wholly owned subsidiary of Clean TeQ Holdings.

The project was approved by the then Minister for Urban Affairs and Planning in May 2001, and has since been modified four times. The consent allows for the construction, operation and rehabilitation of:

- an open cut mine and processing facility, with a production rate of up to 2.5 million tonnes per annum (tpa) of run-of-mine (ROM) ore to produce up to 53,000 tpa of nickel and cobalt sulphide precipitate and up to 180 tpa of scandium oxide;
- associated infrastructure, including waste emplacements, a tailings storage facility, evaporation ponds and surge dam;
- a limestone quarry and limestone processing facility;
- water supply pipeline and borefields; and
- a rail siding and natural gas pipeline.

The consent also allows Scandium21 to build a construction accommodation camp adjacent to the mine infrastructure area. The approved camp includes facilities for approximately 1,000 personnel, an electricity transmission line, a water pipeline, sewerage and irrigation infrastructure.

The consent was triggered in 2006 with partial development of the borefields, but further development of the project was suspended due to unfavourable economic conditions. Scandium21 is now planning to progress development of the mine to meet the projected growth in demand for nickel and cobalt (particularly for use in lithium-ion batteries). In preparation for this, Scandium21 recently undertook a project optimisation study to identify opportunities to improve the efficiency of the mine.

To give effect to the findings of the optimisation study, Scandium21 is now seeking two further modifications to the development consent:

- changes to the processing method, mine layout and water supply infrastructure (Modification 4); and
- changes to the accommodation camp (Modification 6).

Modification 4 is currently under assessment and the Department will refer the application to the Independent Planning Commission for a decision once this assessment is finalised.

Modification 6 is the subject of this report.

2 PROPOSED MODIFICATION

Scandium21 is seeking to modify its development consent to:

- relocate the approved accommodation camp (which has not yet been constructed) from the mine site to the 'Sunrise' property approximately 4 kilometres south of the mine on the eastern side of Wilmatha Road (see **Figures 1 and 2**);
- increase the capacity of the accommodation camp from approximately 1,000 to 1,300 personnel during the construction phase of the project; and
- use the accommodation camp during operations for approximately 300 personnel, which was not originally envisaged.

The proposed camp would be located within a predominately cleared agricultural landscape, with the 'Sunrise' property (now owned by Scandium21) currently used for grazing and dryland cropping. Workers accessing the camp would travel via Wilmatha Road (extending north-west from Fifield and past the mine site) and Sunrise Lane (extending west from Wilmatha Road).

Scandium21's justification for the relocation is that it would reduce the potential for sleep disturbance for the workforce and generally improve its amenity by locating the camp further away from the mine.

The proposed layout of the camp is shown in **Figure 2**, and is described in detail in the Environmental Assessment (EA) (see **Appendix C**).

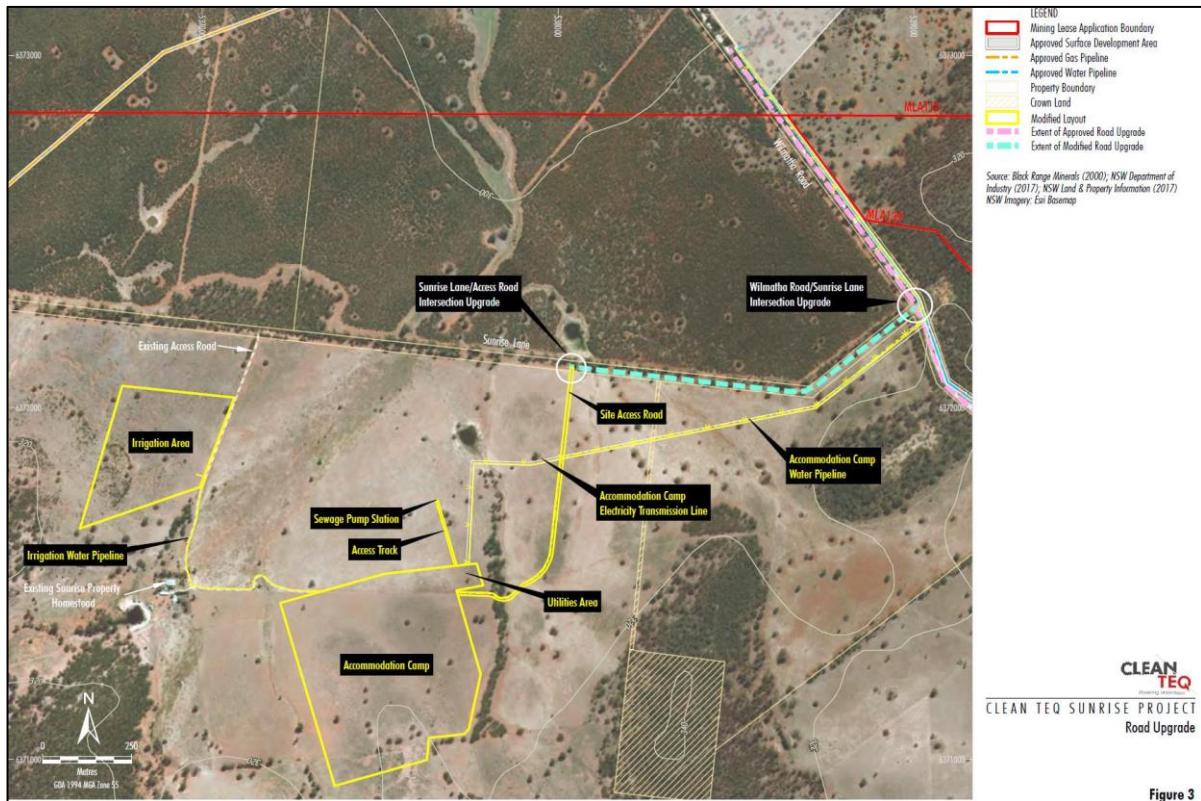


Figure 2: Proposed accommodation camp layout

3 STATUTORY CONTEXT

The project was originally approved under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Despite consent being granted by the Minister under Part 4 of the EP&A Act, the project is classified as a transitional Part 3A project, and must therefore be assessed and determined under the former Section 75W of the EP&A Act.

The power to modify transitional Part 3A projects under Section 75W of the Act as in force immediately before its repeal on 1 October 2011 is being wound up – but as the request was lodged prior to the ‘cut off’ date of 1 March 2018, the provisions of Schedule 2 (clause 3) continue to apply. Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations.

The modification would involve relocating the accommodation camp to a new location some distance from the original site and not adjacent to the mine site. However, the Department considers that the application can be characterised as a modification as:

- there would be no significant changes to the project scale, mining method or production rate;
- the accommodation camp is ancillary infrastructure to support the development and was envisaged for the original project;
- there would be no significant changes to the infrastructure required at the accommodation camp itself;
- the proposed site for the accommodation camp is cleared agricultural land similar to the approved development location;
- the approved project already comprises multiple, geographically dispersed components, and the additional disturbance footprint would only represent a small proportion of the currently approved project area; and
- the modification would not significantly increase the environmental impacts of the approved project (see **section 5**).

Consequently, the Department considers that the proposed modification is within the scope of Section 75W of the EP&A Act.

The Minister for Planning is the approval authority for the modification application. However, under the Minister’s delegation dated 11 October 2017, the Executive Director, Resource Assessments and

Business Systems, may determine the application. This is because there were fewer than 25 public objections to the modification, no reportable political donations were made, and Lachlan Shire Council did not object to the proposal.

4 CONSULTATION

The Department publicly exhibited the application and accompanying EA from 23 January 2018 to 7 February 2018. During the public exhibition period, the Department:

- advertised the exhibition of the application in the Parkes Champion Post, the Forbes Advocate and the Condobolin Argus; and
- made the application and accompanying documentation available on its website, at the Nature Conservation Council, and at Lachlan Shire Council offices.

The Department also visited the site and met with Lachlan Shire Council and some neighbouring landholders to discuss the proposal.

The Department received three public submissions objecting to the proposal as well as advice from six government agencies, none of which objected to the proposed modification. Copies of the advice and submissions and Scandium21's response, are provided in **Appendices D** and **E** respectively.

A summary of the issues raised is provided below.

4.1 Agency Advice

The Department consulted with Lachlan Shire Council and key government agencies, and notified Parkes Shire Council and Forbes Shire Council of the modification.

Lachlan Shire Council (Council) raised concerns about dust and safety on the dirt roads between the accommodation camp and the mine site (i.e. Wilmatha Road and Sunrise Lane), and initially recommended that both roads be sealed prior to construction of the accommodation camp. Following further consultation, Council and Scandium21 have reached an in-principle agreement regarding the proposed road upgrade and maintenance works, as discussed in **section 5.1**.

Council also initially requested that Scandium21 develop a Waste Management Strategy for the project. The Department notes that while there would be a small increase in waste produced from the additional workers housed at the camp, off-site disposal of the waste could be at any of a number of licenced landfills in the region, and would be the subject of a commercial agreement between Scandium21 and the landfill operator.

Onsite management of waste would be the same as it would have been at the approved camp, and the existing conditions require Scandium21 to minimise the waste generated, and to store and handle waste in accordance with the EPA's *Waste Classification Guidelines 2014*. Accordingly, the Department is satisfied that no further conditions are required, and Council has raised no further concerns.

Roads and Maritime Services (RMS) identified the Safe Intersection Sight Distance (SISD) requirements under *Austroads Guide to Road Design Part 4A* for both directions at the access point from Sunrise Lane to the accommodation camp. Scandium21 agreed to implement these requirements and RMS has no residual concerns.

The **Office of Environment and Heritage (OEH)** noted that the area to be impacted was assessed in accordance with the Biodiversity Assessment Method and determined that no offset was required. OEH also noted that a new Aboriginal Heritage Impact Permit (AHIP) would be required for an Aboriginal heritage site that would be affected by the proposal. Scandium21 acknowledged the need for a new AHIP and OEH has no residual concerns.

The **Environment Protection Authority (EPA)** raised no concerns about the modification, and noted the proposed modification would not require an Environment Protection Licence.

The Department of Industry – Lands and Water Divisions (Dol) recommended conditions of consent related to rehabilitation of the site, works on waterfront land, and preparation of a Water Management Plan. These issues are addressed in **section 5.2**.

The Department of Planning and Environment - Division of Resources and Geoscience (DRG) noted that two exploration licences cover the proposed site and advised that Scandium21 should consult with the titleholders and consider any resource sterilisation impacts. Scandium 21 advised that it had notified the respective titleholders but had not received any response.

However, following the exhibition period, the Department received a letter from the titleholder, objecting to the proposal on the grounds it would potentially sterilise the mineral resource. The Department has consulted with DRG on this matter and addressed it in **section 5.2**.

4.2 Public Submissions

During the exhibition period, the Department received three submissions from the public objecting to the proposal. These submissions raised concerns about:

- potential impacts on the condition and safety of the local roads;
- the impacts on the local community and local businesses from a fly-in-fly-out workforce;
- the additional pressure placed on local community resources such as health services and police; and
- changes to drainage on the new site.

5 ASSESSMENT

In assessing the merits of the proposed modification, the Department has considered the:

- existing conditions of consent for the project;
- modification application and supporting information; and
- agency advice and public submissions on the application and Scandium21's response to submissions.

A summary of the Department's assessment is provided below.

5.1 Traffic

The three public submissions and Lachlan Shire Council raised concerns about the potential impact of additional traffic on the local road network. In particular, they raised concerns about road safety issues from traffic-generated dust, as Wilmatha Road and Sunrise Lane are unsealed roads.

Construction traffic

The proposed relocation of the accommodation camp would change the project-related traffic movements. This would ultimately result in an increase in the number of light vehicles on both Wilmatha Road and Sunrise Lane during construction.

The proposed modification is predicted to generate up to an additional 188 traffic movements per day along Wilmatha Road (between Sunrise Lane and the mine access road) during the peak construction period (i.e. an increase from 570 to 758). However, the additional traffic is not predicted to significantly change the level of service on Wilmatha Road, which is currently forecast as a Level of Service B, and represents good operating conditions.

It would also generate up to 391 additional traffic movements per day on Sunrise Lane during the peak construction period. However, this road already has very low traffic volumes with no through-traffic and the proposed increase is not predicted to have any significant impacts on local road users, subject to the appropriate road upgrades.

The proposed modification would not significantly change the approved project traffic movements per day along Wilmatha Road between Sunrise Lane and Fifield during the construction period.

Operational traffic

During the operational phase, the modified accommodation camp would generate approximately 90 traffic movements per day along Wilmatha Road (between Sunrise Lane and the mine access road) when it is being utilised at full capacity. As the majority of these traffic movements would be associated with short-term contractors traveling to and from the site, these movements would be generated irrespective of the modification.

Road upgrades and maintenance

The Department notes the existing consent includes a number of traffic and transport conditions requiring Scandium21 to:

- enter into a VPA with Lachlan Shire Council that includes provisions for the funding of road upgrades and ongoing road maintenance for the project;
- prepare and implement a Road Upgrade and Maintenance Strategy in consultation with Council and RMS detailing the required road upgrade requirements for the project, and a program for their implementation and maintenance; and
- prepare and implement a detailed Traffic Management Plan in consultation with relevant road authorities.

The VPA terms in the existing conditions of consent already require Scandium21 to widen and seal Wilmatha Road prior to commissioning the mine processing facility. Scandium21 has also agreed to upgrade the site access road/Sunrise Lane intersection and Sunrise Lane/Wilmatha Road intersection (see **Figure 2**).

In addition to the existing requirements, Lachlan Shire Council has agreed in principle to the terms of an updated VPA requiring Scandium21 to:

- fund the agreed upgrades of Sunrise Lane consistent with a Class 4A unsealed road prior to commissioning the accommodation camp; and
- maintain Sunrise Lane to the satisfaction of Council during construction and operation of the mine and processing facility.

The Department has included the agreed road upgrade and maintenance requirements in the recommended conditions of consent.

Scandium21 has also committed to applying dust suppression measures during construction to reduce the amount of traffic generated dust, which would be detailed in the Traffic Management Plan to be prepared and implemented for the project.

With these conditions in place, the Department is satisfied that the modification would not result in unacceptable impacts on the capacity, efficiency or safety of the road network.

5.2 Other Issues

A summary of the Department's assessment of other relevant issues is provided in **Table 1**.

Table 1: Assessment of Issues

Issue	Consideration	Recommendation
Social	<ul style="list-style-type: none"> • Two submissions from the public raised concerns that Scandium21 would source its workforce from outside the local area, and that the local community would miss out on jobs, training and other economic benefits associated with the project. A construction camp to house the construction workforce has always been envisaged for the project and is permitted under the existing consent. • The modification does not seek to change the employment strategy or construction workforce size, and Scandium21 is not proposing to use a fly-in-fly-out workforce. Scandium21 is also committed to using local suppliers preferentially, which would continue to support local employment in the area. • During operations, the accommodation camp would be used for short-term contractors and visitors (e.g. exploration crews during drilling programs and short-term contractors brought in for scheduled maintenance shutdowns). Due to the short-term nature of the work, it is unlikely that these workers would be integrated into the local community. No permanent employees or contractors would reside in the modified accommodation camp on a full-time basis. • Accordingly, the Department is satisfied that the modification would not limit local employment and training opportunities during the construction and operation of the mine. • Concerns were also raised by community members that the project would place additional pressure on local infrastructure such as roads and health and police services. 	<ul style="list-style-type: none"> • Comply with existing conditions

Issue	Consideration	Recommendation
Biodiversity	<ul style="list-style-type: none"> • However, the Department is satisfied that this is not the case. Firstly, the accommodation camp would be equipped with its own services. Secondly, as discussed above, Scandium21 has agreed to upgrade and maintain the local roads affected by the modified traffic. Thirdly, the workers using the camp during operations would be short term and unlikely to avail themselves of health or other services on a regular basis. Finally, the ongoing availability of accommodation during operations would reduce rather than increase the pressure on short term accommodation in the local towns. • The Department believes that the provision of accommodation in close proximity to the mine would also marginally improve road safety, as contract workers, potentially fatigued by long shifts, would not have to commute the longer distances between the towns and the mine. 	<ul style="list-style-type: none"> • Comply with existing biodiversity conditions • Update water performance measures to include management of irrigation area in accordance with EPA Guidelines
Aboriginal Heritage	<ul style="list-style-type: none"> • Although the proposed site contains some areas of threatened Derived Native Grassland (Grey Box Woodland), the modified accommodation camp is proposed to be constructed solely within previously cleared/cultivated land. • Approximately 27.5 ha of low quality regrowth identified as Mugga Ironbark – Western Grey Box would be cleared, however this vegetation is low quality, not threatened and below the threshold value for generating ecosystem credits. OEH has agreed that no offsets would be required. • The irrigation area would cover approximately 10.5 ha of previously cleared land with advanced grassland/shrubland regeneration. No clearing would be required for the irrigation area or the irrigation pipeline, which would be laid above ground beside an existing track. • Scandium21 proposes to manage the irrigation area in accordance with the EPA's <i>Environmental Guidelines: Use of Effluent by Irrigation</i> and no adverse impacts are predicted to the vegetation in this area. • OEH did not raise concerns about biodiversity impacts, and the Department is satisfied the modification would not significantly increase the biodiversity impacts of the approved project. 	<ul style="list-style-type: none"> • Comply with existing conditions
Land Use and Minerals	<ul style="list-style-type: none"> • Field surveys of the proposed camp area identified four Aboriginal heritage sites, including three stone artefact sites and a hearth site. All four sites are considered to have low scientific significance. • The archaeological assessment concluded that other isolated finds or low density concentrations of stones artefacts could potentially exist within and around the site. • Registered Aboriginal Parties attending the survey did not identify any specific locations within the site as being of exceptionally high or specific cultural significance. • Three of the identified Aboriginal heritage sites would be avoided and a 10 m buffer maintained around the sites. • One site (a stone artefact) is located within the area proposed for the accommodation camp. Scandium21 is proposing to salvage the objects at that site. • As noted by OEH, Scandium21 would be required to obtain an AHIP prior to undertaking any works that might harm Aboriginal objects, including salvage works. • The existing conditions also require Scandium21 to prepare a Heritage Management Plan for the project that describes how they propose to protect, monitor and manage Aboriginal items on site, including previously unidentified heritage objects. • OEH did not raise concerns about Aboriginal heritage, and the Department is satisfied that impacts to Aboriginal heritage are minor, and the existing conditions and the requirement to obtain an AHIP are sufficient to protect and manage Aboriginal Heritage on the site. 	<ul style="list-style-type: none"> • Noted

Issue	Consideration	Recommendation
	<ul style="list-style-type: none"> Further, the camp size would be substantially reduced after the construction phase and would be entirely decommissioned at the end of the project life. Consequently, the Department and DRG are satisfied that the resource would not be sterilised. 	
Water	<ul style="list-style-type: none"> Raw treated water would be supplied to the accommodation camp from the mine site via a water pipeline. Consistent with the approved project, sewage and wastewater would be collected and treated. Effluent produced from the treatment plant would be pumped to the irrigation area for discharge, and solid waste would be collected for disposal by a licensed contractor. Scandium21 proposes to control the discharge rate to manage the nutrient, salt, organic material and hydraulic load applied to the soil, and to manage the irrigation area in accordance with the relevant NSW guidelines. The Department is satisfied that with the appropriate management systems in place, any adverse impacts on soil and water can be avoided, and has included a condition requiring Scandium21 to describe the proposed water management system for the irrigation area in detail in the Surface Water Management Plan. The Department notes that, as the mine Environment Protection Licence would not extend over the modified accommodation camp site, Scandium21 would be strictly prohibited from polluting offsite waters. A submission from a neighbouring resident raised concerns about a reduction in runoff reaching downstream properties. However, the Department notes that the proposed changes to flows are for the purposes of sediment and erosion control during construction, and site runoff would be free draining (apart from the utilities area) during operations. Consequently, the Department is satisfied that any changes to downstream flows would be negligible. 	<ul style="list-style-type: none"> Comply with existing conditions Include the irrigation area in the description of the water management systems required under the Surface Water Management Plan
Noise and Air Quality	<ul style="list-style-type: none"> While construction of the camp would generate noise and dust further from the mine site than approved under the original consent, the closest privately-owned receiver is located more than 2.5 km away from the camp. The conditions of consent require Scandium21 to minimise noise during construction in accordance with the <i>Interim Construction Noise Guideline</i> (DECC, 2009) and establish limits for dust concentrations. Construction noise is predicted to comply with the <i>Interim Construction Noise Guideline</i>, and no potential exceedances of relevant air quality criteria are predicted at any receiver. The Department is satisfied that there would be no noise or air quality impacts beyond those already approved. 	<ul style="list-style-type: none"> Comply with existing conditions
Visual	<ul style="list-style-type: none"> The accommodation camp would be visible from Sunrise Lane. However, no privately-owned dwellings would have views of the camp due to the intervening topography and vegetation. 	<ul style="list-style-type: none"> Comply with existing conditions

6 RECOMMENDED CONDITIONS

The Department has prepared a Notice of Modification (see **Appendix A**), as well as a consolidated version of the development consent as modified (see **Appendix B**). Scandium21 has reviewed the revised conditions and raised no objections to the proposed amendments.

7 CONCLUSION

The Department has assessed the proposed modification application, EA, advice received from agencies and response provided by Scandium21, in accordance with the relevant requirements of the EP&A Act.

Based on this assessment, the Department considers that the key impacts of the proposed modification would be from the additional traffic between the new accommodation camp site and the mine. The Department is satisfied that the potential traffic impacts could be managed with the imposition of

conditions requiring Scandium21 to implement a number of road upgrades and maintain Sunrise Lane during construction to the satisfaction of Lachlan Shire Council.

The Department is satisfied that the proposed modification is unlikely to result in any other significant impacts beyond those associated with the approved project, and the existing conditions of consent would be adequate to manage the modified project.

The Department acknowledges that the modification would improve the amenity for the workforce using the accommodation camp and minimise operational constraints at the mine site, thereby facilitating efficient operation of the mine.

Importantly, the proposed modification would facilitate the development of the project with its associated socio-economic benefits, including capital investment of US\$784 million and employment of up to 300 people during operations. This level of investment would also stimulate flow-on economic benefits in the local and regional economies.

Consequently, the Department considers the proposed modification is in the public interest and should be approved, subject to conditions.

8 RECOMMENDATION

It is recommended that the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister for Planning:

- **consider** the findings and recommendations of this report;
- **determine** that the request (DA 374-11-00 MOD 6) falls within the scope of section 75W of the EP&A Act;
- **modify** the consent for the Sunrise Project (DA 374-11-00); and
- **sign** the attached modification of approval (**Appendix A**).

Recommended by:

 23/5/18

Rose-Anne Hawkeswood
Senior Environmental Assessment Officer
Resource and Energy Assessments


Recommended by:

 . 23/5/18.

Phillipa Duncan
A/Director
Resource and Energy Assessments

9 DECISION

The recommendation is Approved / Not approved by:

 25/5/18

David Kitto
Executive Director
Resource Assessments and Business Systems
 as delegate of the Minister for Planning

APPENDIX A: NOTICE OF MODIFICATION

APPENDIX B: CONSOLIDATED CONSENT

APPENDIX C: MODIFICATION APPLICATION

Refer to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8829

APPENDIX D: SUBMISSIONS

Refer to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8829

APPENDIX E: RESPONSE TO SUBMISSIONS

Refer to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8829