

ASSESSMENT REPORT

NORTHPARKES MINE

Mine Plan Modification (11_0060) MOD 3

1 BACKGROUND

The Northparkes Mine is a copper-gold mine located approximately 27 kilometres (km) northwest of Parkes in the Parkes Shire local government area (see **Figure 1**). The mine is owned and operated by CMOC Mining Pty Ltd (CMOC), a joint venture between CMOC Mining Services (80%) and Sumitomo (20%).



Figure 1: Location of the Northparkes Mine

The Northparkes Mine has been operating since 1993, and is comprised of open cut and underground operations. The mine currently operates under the Northparkes Extension Project Approval (11_0060), which was granted under delegation from the Minister for Planning and Environment on 16 July 2014.

The current approval allows for the continuation and expansion of mining activities, including:

- extracting of ore by block cave, sub-level caving and open cut mining techniques until the end of December 2032;
- processing up to 8.5 million tonnes per annum of ore to produce copper concentrate;
- operating a range of ancillary infrastructure including water supply and management infrastructure, tailings storage facilities and mine access roads; and
- transporting copper concentrate to the Goonumbla rail siding by road, and onward rail to Port Kembla for export.

CMOC aims to provide a constant supply of ore to put through the processing plant to maintain consistent copper concentration production. Accordingly, flexibility in mine design is essential to maintain the primary mill feed, and mine planning is refined through ongoing exploration and detailed mine design.

CMOC proposes to extend the E26 underground mining area to extract a halo of copper mineralisation from the north and east of the E26 ore body.

2 PROPOSED MODIFICATION

CMOC is seeking approval for a modification to its project approval under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

To date, the E26 ore body has been mined using a combination of block caving and sub-level caving techniques, with extraction levels established at approximately 480 metres (m) and 830 m below the surface.

The proposed modification would involve the establishment of an additional extraction level at approximately 520 to 540 m below ground level at the northern extent of the approved E26 underground mine to target approximately 36 million tonnes of ore.

An overview of existing mining operations in the E26 area is shown in **Figure 2**. The proposed extension, referred to as E26 Lift 1N, is depicted in blue in **Figure 3**.

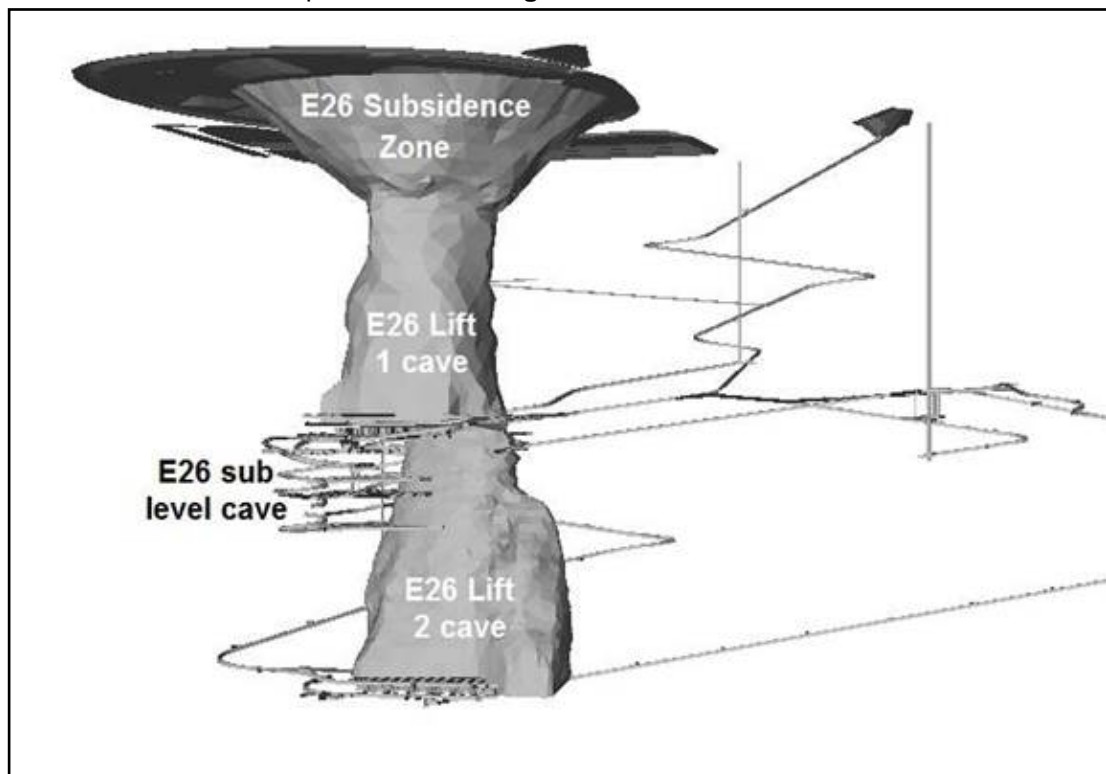


Figure 2: Underground mining in E26

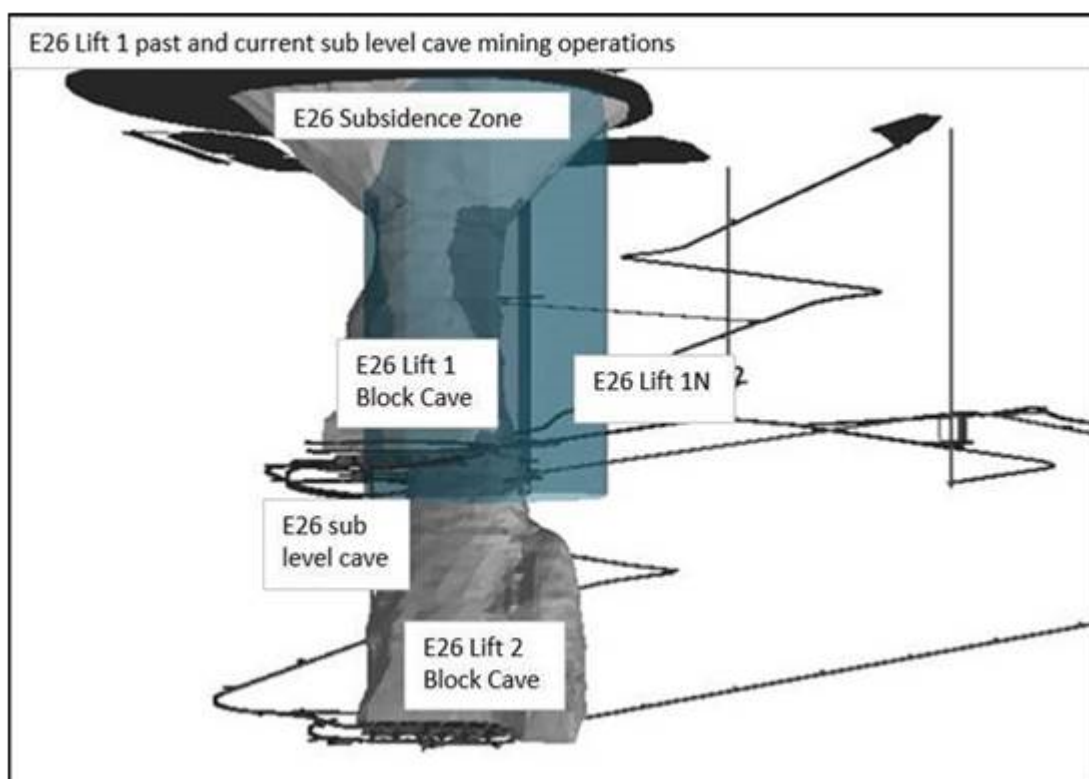


Figure 3: Proposed underground mining area

Tunnelling and underground conveyor infrastructure would be constructed to transport ore from the new area. However, no new surface infrastructure is proposed, and there would be no changes to the processing rate or mine life.

The proposed modification is described in detail in the attached Environmental Assessment (EA) (see **Appendix C**).

3 STATUTORY CONTEXT

The Northparkes Mine was originally approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Although Part 3A was repealed on 1 October 2011, the project remains a 'transitional Part 3A project' under Schedule 6A of the EP&A Act, and hence any modification to this approval must be made under the former Section 75W of the Act.

Based on its assessment, the Department is satisfied that the application can be characterised as a modification to the existing approval (rather than a new project) as the proposal is considered a minor matter that would not substantially increase the environmental impacts of the project.

The Minister for Planning was the approval authority for the original project application, and is therefore the approval authority for this modification application. However, under the Minister's delegation dated 16 February 2015, the Director, Resource and Energy Assessments, may determine the application, as no public submissions in the form of objections were received on the proposal, no reportable political donations were made, and Parkes Shire Council raised no objection to the proposal.

4 CONSULTATION

The Department exhibited the modification application from 25 July 2017 to 8 August 2017 and made the accompanying EA publicly available on its website and at the Parkes Shire Council. The Department also consulted with relevant government agencies and Parkes Shire Council.

No public submissions were made, and no concerns about the modification were raised by the agencies of Parkes Shire Council.

5 ASSESSMENT

In assessing the merits of the proposal, the Department has considered:

- the modification application and supporting information (**see Appendix C**);
- the EA and conditions of approval for the original project;
- relevant environmental planning instruments, policies and guidelines; and
- the requirements of the EP&A Act

The modification would extend the subsidence zone by up to 100 m to the northeast of the originally predicted E26 subsidence zone. However, although the caving footprint would be larger, it would be confined to the approved E26 open cut mining footprint and the surface disturbance would be similar to the approved disturbance in that area.

While fracturing and collapse of rock caused by mining activities could potentially alter groundwater flows, the existing E26 caved zone has already been drained and depressurised by up to 14 years of mining. Seepage caused by additional mining of the ore body is not predicted to contribute significantly to mine inflows, and additional impacts to groundwater levels are expected to be negligible. Consequently, there would be no additional impacts on groundwater quality or quantity for nearby groundwater users.

The Department is satisfied that the existing conditions of consent, which require CMOC to provide compensatory water supplies to any landowner whose water supply is adversely affected by the project, are adequate to mitigate any residual risk from the modification.

Neither the Division of Resources and Geosciences nor the Department of Primary Industries (Water), raised concerns about subsidence or groundwater impacts from the modification.

The approved tailings storage facility has sufficient capacity to accommodate the additional tailings from the new mine area, and no additional surface infrastructure is proposed.

Given there would be no additional surface disturbance, the Department is satisfied that there would be no impacts to biodiversity, heritage or amenity beyond those already approved.

6 RECOMMENDED CONDITIONS

The Department has prepared a draft Notice of Modification (**see Appendix A**) and Consolidated Project Approval (**see Appendix B**), recommending some minor administrative changes to the conditions including updating the mine plans to reflect the new underground mining area.

7 CONCLUSION

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act.

The Department believes that the modification is reasonable and would have no significant environmental impacts beyond those associated with the original project.

The modification is also in the public interest, as it would allow CMOC to maximise the extraction of minerals thereby increasing royalty payments to the State, and would contribute to security of employment for the mine workforce.


Consequently, the Department believes the proposed modification is approvable, subject to conditions.

RECOMMENDATION

It is recommended that the Director, as delegate for the Minister for Planning:

- Consider the findings and recommendations of this report;
- Determine that the application falls within the scope of section 75W of the EP&A Act;
- Approve the modification application 11_0060 MOD 3, subject to conditions; and
- Sign the attached notice of modification (**Appendix A**).

Recommended by:

 21/9/17

Joel Herbert
Planner

Recommended by:

 21/9/17

Rose-Anne Hawkeswood
Senior Planner

DECISION

Approved by:

 22/9/17

Clay Preshaw
Director, Resources and Energy Assessments
as delegate of the Minister for Planning.

APPENDIX A: NOTICE OF MODIFICATION

APPENDIX B: CONSOLIDATED PROJECT APPROVAL

APPENDIX C: ENVIRONMENTAL ASSESSMENT