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8 April 2014

Mr David Kitto
Executive Director, Resources Assessments and Business Systems
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Kitto

RE: NORTHPARKES MINES – APPLICATION FOR A 75W MODIFICATION

After consultation with the Department of Planning and Environment and the Department of NSW Trade and Investment – Resources and Energy, Northparkes Mines (Northparkes) seeks to modify Project Approval (11_0060) under Section 75W of the *Environmental Planning and Assessment Act*, 1979 (EP&A Act) to allow for the inclusion of Sub-Level Caving (SLC) as a mining method.

Northparkes is an existing copper-gold mine located approximately 27 kilometres north-west of Parkes in the central west region of New South Wales (NSW).

Northparkes has been operational since 1993 and has included the development of open cut and underground mining operations targeting a number of ore bodies, as well as associated ore processing and tailings storage infrastructure. The existing operations have been developed in accordance with a number of development consents and project approvals, the most recent of which being Project Approval of PA11_0060 – Northparkes Extension Project issued on 16 July 2014.

The current approval allows for open cut and block cave mining of the E48 and E26 ore bodies, this application seeks to also extend this to include Sub-Level Caving (SLC). The SLC method employs the same mode of ground, and surface, disturbance as Block Caving.

Description of the Modification

Section 1 Part 1 of Northparkes Extension Project PA11_0060 allows for: *... continuation of approved underground block cave mining in the E48 and E26 ore bodies and associated underground infrastructure ...*

Northparkes has completed a feasibility study which has indicated that the SLC technique, a mining method affiliated with block caving, is the most effective way to recover reserves in the E26 area that would otherwise remain as sterilised resource.

As this area was previously planned for extraction using the block cave mining method, the disturbance created by SLC is expected to be no more than previously planned.

Thus, Northparkes wishes to modify the approved mining techniques to allow for 'continuation of approved underground cave mining in the E48 and E26 ore bodies and associated underground infrastructure'. This allows for both the block caving and SLC mining techniques to be utilised.

The change in caving method would not change the following existing/approved Northparkes Mine components:

- Surface Impacts;
- Mining Areas;
- Noise;
- Blasting;
- Air Quality;
- Water;
- Heritage;
- Transportation Network;
- Visual Change;
- Bushfire Management;
- Waste; and,
- Rehabilitation.

The SLC mining method, like block caving, belongs to a group of unsupported extractive mining techniques classed as caving methods. Caving methods rely on the undercutting of an area of rock, and then gradual failure of the overlying rock due to gravity and stress, to minimise mining risk and supply production.

Figure 1 provides a visual comparison of the block caving and SLC methods. Both images show the top level, or undercut level, of a block cave or SLC mine. This level is retreat drill and blasted using conventional mining techniques. The blasted material is loaded from the undercut level and makes up the initial production for the mine. The rock above the undercut progressively fails due to gravity and stress.

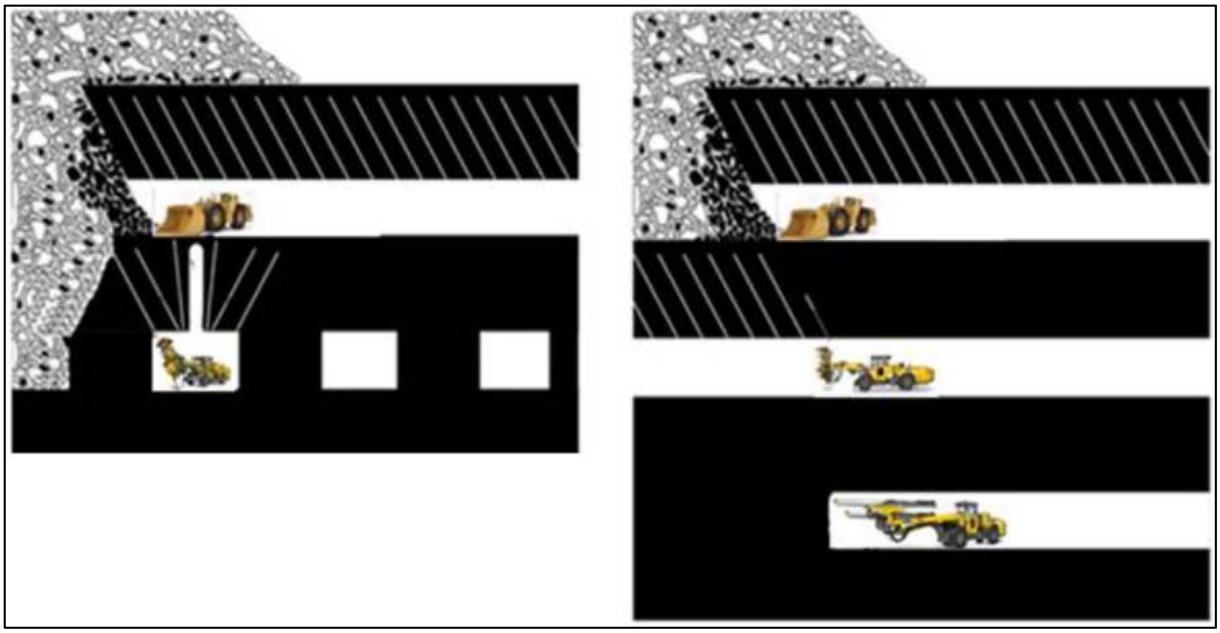

Figure 1: Idealised comparison between Block Caving (Left) and SLC (Right).

Typically, in a block cave, the second level is developed as the primary extraction level, where drawbells are constructed to funnel caved material to long-term drawpoints. In SLC mining, the second and subsequent levels are constructed in the same fashion as the undercut level, which is again retreat drill and blasted. In this way, SLC mining is akin to continuous undercutting.

While there is significantly more development associated with the SLC mining method over block caving (through the construction of more undercut horizons), since both methods rely on the caving technique, the impacts associated with the technique are ultimately the same.

Assessment of Potential Impacts

An assessment of the potential impacts associated with the requested Modification is provided in Table 1.

Table 1: Potential Impacts Associated with the Modification

Environmental Aspect	Potential Impacts
Subsidence/Surface Impacts	No change to the existing/approved surface development/impact areas: • Subsidence impacts are expected to be within currently approved subsidence management zones.
Water Resources	No change to the existing/approved surface/underground development/impact areas. • No change from current Water Management Plan.
Visual	No change to the existing/approved surface development/impact areas.
Land Resources	No change to the existing/approved surface development/impact areas.
Flora and Fauna	No change to the existing/approved surface development/impact areas.
Hazards and Risks	No change to the existing/approved underground mining techniques. The undercutting process applied for Block Caving will be employed for the Sub-Level caving mining method.
Workforce	No change to the existing/approved. The SLC project provides Northparkes the opportunity to maintain current human resourcing.

The assessment of potential impacts associated with the Modification (in Table 1) demonstrates that there would be no more than previously approved.

No change to the existing management measures and monitoring outlined in the Project Approval of PA11_0060 – Northparkes Extension Project would be required for the Modification.

Proposed Modified Project Approval Conditions

Northparkes Mine proposes that references to mining operations within Project Approval (11_0060) be modified to: *"Continuation of approved **underground cave mining** of the E48 and E26 ore bodies and associated underground infrastructure..."*

No other Project Approval (11_0060) conditions would require changing for the Modification (apart from administrative changes).

Northparkes appreciates the consultation and time provided by the Department of Planning and Environment in this matter, and looks forward to continued development and growth of Northparkes.

Yours sincerely

Rob Cunningham
HSE&F Manager
CMOC Mining Services Pty Limited