

2016

Northparkes Mines

Compliance Report against Project Approval EPBC 2013/6788



Donating felled trees to NSW DPI – Fisheries to re-s snag a stretch of the Macquarie River to create habitat for the nationally threatened Murray Cod

Revision Summary

First Issue	Issue Date	Implementation Requirements	Approved By
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1. INTRODUCTION

CMOC-Northparkes Mines (Northparkes) is a copper and gold mine located 27 kilometres north-west of Parkes, in the Central West of New South Wales, Australia.

Northparkes is a joint venture between China Molybdenum Co., Ltd (CMOC) (80%) and the Sumitomo Groups (20%).

Mining has been taking place at Northparkes for over 20 years. Our current Environmental Assessment allows operations until 2032 – our vision is to operate for 'A century of mining together'.

We were the first mine in Australia to use the highly efficient block cave mining method, now used in several mines throughout the country. The first full-scale production was from E26 Lift 1 block cave in 1997.

In 2006, we began construction of a new block cave mine on the E48 copper and gold deposit with production officially commencing in September 2010. In 2016 we began production from the E26 Sub-Level Cave.

Northparkes is proud to be a farmer as well as a miner owning approximately 10,314 ha of land in Central West NSW. Mining operations occupy 1,630 ha and the remaining area operates as a commercial agricultural and logistics operation.

1.1 Project background

The Northparkes Mine Step Change Project (the Project) was approved with conditions under section 130 (1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999) on 13th February 2014 (EPBC 2013/6788). Key elements of the Project included:

- continued underground block cave mining in two existing ore bodies;
- the development of an additional underground block cave mine, under one of the existing open cut pits;
- additional campaign open cut mining in existing mine leases;
- augmenting approved Tailings Storage facilities (TSFs); moving the existing access road; construction of the new TFS (Rosedale) (

- Figure 1); and
- extending the life of the mine by seven years to 2032.

In early 2015, construction commenced on the Rosedale Tailing Storage Facility Project (the Rosedale Project) (Figure 2), which included:

- extending the approved TSF 2;
- construction of the new Rosedale TSF;
- construction of a new main access road (known as Northparkes Way) as well as upgrades to existing roads;
- construction of a new access control for site; and
- stockpiles associated with construction of the TSF.

On 25 February 2016, Northparkes Mines received a variation to Project Approval EPBC 2013/6788 following correspondence between Northparkes and the Department of the Environment. This variation included the deletion of conditions 4, 6 and 7 attached to the approval dates 13 February 2014 and substitution with updated conditions 4 and 6 as specified in the variation to conditions document dated 25 February 2016. These variation have been outlined in Table 2.

On 10 June 2016, Northparkes submitted the 2015 Northparkes Mines Compliance Report against Project Approval EPBC 2013/6788 (the 2015 Compliance Report) to the Department of the Environment for assessment. On the 16 July 2016, the Department of the Environment responded and confirmed that the 2015 Compliance Report satisfied the requirements of EPBC approval 2013/6788. The current report has been produced to satisfy the requirements of EPBC approval 2013/6788 for works undertaken in 2016.

1.2 Purpose of this report

This report has been produced to address compliance with Condition 12, EPBC2013/6788 stating that:

Within 3 months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any plans as specified in the conditions.

As the commencement of the action occurred on 13 March 2015, this report will be published on Northparkes Mines web page by 12 June annually.

Refer to the sections below and the associated appendices for information on the compliance activities undertaken to fulfil the conditions outlined in EPBC 2013/6788.

Figure 1 Indicative Location of Northparkes Mines Step Change Project Features

Figure 1 Northparkes Mines Step Change Project



Legend

- | | | | |
|---|---|---|---|
|  | McClintocks Lane - Bogan Road Intersection Upgrade |  | Processing Plant and Administration Areas |
|  | New Site Access Road (Northparkes Way) and McClintocks Lane Upgrade |  | Approved Subsidence Management Areas |
|  | Site Boundary |  | New Underground Block Cave Mining Area |
|  | Tailings Storage Facility Extension |  | Waste Dumps |
|  | New Access Control | | |
|  | Existing Tailings Storage Facilities | | |
|  | Rosedale Tailings Storage Facility | | |
|  | Proposed Open Cut Area | | |



Figure 2 Indicative Disturbance Areas for Northparkes Mines Rosedale Project

Figure 2 Northparkes Mines Rosedale Project



Legend

-  McClintocks Lane- Bogan Road Intersection Upgrade
-  New Site Access Road (Northparkes Way) and McClintocks Lane Upgrade
-  Site Boundary
-  Rosedale Tailings Storage Facility
-  Topsoil Stockpile
-  Subsoil Stockpile
-  New Access Control
-  Wood Stockpile



2. CONDITIONS ATTACHED TO THE PROJECT APPROVAL UNDER THE EPBC ACT (EPBC 2013/6788)

The tables below outline the approval conditions in EPBC 2013/6788 and the associated compliance activities undertaken to fulfil these conditions.

Table 1 Avoidance and mitigation of impacts on site

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
1.	The person taking the action must not clear more than 46 hectares of Grey Box (<i>Eucalyptus macrocarpa</i>) grassy woodlands and derived native grasslands of south eastern Australia (GBGW) as part of the action.	<p>The vast majority of clearing undertaken as part of the Rosedale Project was undertaken in 2015 and was reported in the 2015 Compliance Report.</p> <p>A small area of vegetation within the mapped GBGW was cleared in 2016, however, the amount cleared of GBGW cleared as part of the project remains under 46 hectares total. A total of 6 trees within the mapped GBGW were cleared in 2016, with none of these assessed to have significant habitat features present. Refer to the Preclearance and Clearing Supervision Report for the Rosedale Eastern Clean Water Drainage for more details.</p>	Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report.	Appendix A
2.	The person taking the action must avoid clearing native vegetation in the Project area, so as to maintain the vegetation specified in Section 2.2 (a) of the Preliminary Documentation and ensure that these areas of native vegetation persist on site.	<p>The vast majority of clearing undertaken as part of the Rosedale Project was undertaken in 2015 and was reported in the 2015 Compliance Report.</p> <p>Additionally, all clearing undertaken as part of the Rosedale Project has been contained to the area approved within EPBC 2013/ 6788.</p> <p>Clearing undertaken in 2016 as part of the Rosedale Project is reported in the Preclearance and Clearing Supervision Report for the Rosedale Eastern Clean Water Drainage.</p>	Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report.	Appendix A
3.	To reduce direct and indirect impacts to matters of national environmental significance, the person taking the action must implement the mitigation measures set out in and as specified in Section 2.2 (b) of the Preliminary Documentation .			
	From Section 2.2 (b) of the Preliminary Documentation Table 2.1 – Pre-clearing surveys	Clearing Supervision was conducted on one project in 2016 which forms part of the area approved within EPBC 2013/6788. This was for the Rosedale Eastern Clean Water Drainage Construction Area.	Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report.	Appendix A

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
	<p>From Section 2.2 (b) of the Preliminary Documentation Table 2.2 – Habitat Augmentation Works</p>	<p>Trees that were felled as outlined in the Clearing Supervision Report for the Rosedale Project in 2015.</p> <p>In February 2016, a small proportion of the wood felled as part of the Rosedale Project was donated to the New South Wales Department of Primary Industries (DPI – Fisheries, Aquatic Restoration Unit) for use in habitat restoration works outside the Project Area. These were to be used to assist in creating habitat for the nationally threatened Murray Cod. This donation of the wood resource was not a requirement of the Northparkes Project Approval.</p> <p>Logs were selected by an employee from DPI – Fisheries, Aquatic Restoration Unit and the DPI. The logs were submerged in a stretch of the Macquarie River between Narromine and Dubbo. In addition to providing habitat the logs are also providing an additional benefit of armouring the banks of the Macquarie River against erosion.</p> <p>The Parkes Men Shed constructed 78 nest boxes. They were constructed out of marine grade ply wood and have been made in a variety of sizes to accommodate a range of species encountered during clearing supervision surveys. Target species for the nest boxes included superb parrot, blue bonnet/rosella, sugar glider, micro bat and brush tailed possum. The nest boxes will be installed in 2017.</p>	<p>Appendix B – Images of Wood donation to NSW Department of Primary Industries (DPI – Fisheries, Aquatic Restoration Unit) and Nest Box Construction. Table containing information on design source for nest boxes, target species and number of nest boxes constructed in 2016.</p>	<p>Appendix B</p>

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
	From Section 2.2 (b) of the Preliminary Documentation Table 2.3 – Clearing Supervision	Clearing supervision was undertaken for all potentially significant habitat features marked during preclearance surveys. Some mature trees were identified in the survey, however none of these trees had any nests or suitable hollows for superb parrot nesting. An ecologist supervised the clearing works as it was conducted in December. This was a controlled implemented to minimise impacts on the superb parrot. No fauna with the exception of common bird species were observed traversing through the area during clearing works. No fauna were recorded to be injured or disturbed during the clearing works.	Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report Section 4.0.	Appendix A
	From Section 2.2 (b) of the Preliminary Documentation Table 2.4 – Vegetation and Habitat Enhancement Monitoring and Maintenance	Vegetation and habitat enhancement monitoring and maintenance activities, as outlined in the Preliminary documentation and Northparkes Flora and Fauna Management Plan, was undertaken at the Kokoda Offset Site in 2016. Qualitative assessments of the natural regeneration across site were recorded during the biannual inspections. It was noted that natural regeneration had progressed since the previous biannual inspections with regeneration 0.5 – 1 m high in some locations.	Appendix C 2016 Kokoda Biodiversity Offset Area Ecological Monitoring Report Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site	Appendix C and D
	From Section 2.2 (b) of the Preliminary Documentation Table 2.5 – Weed Management	Weed management is undertaken on an as needed basis across Northparkes holdings in accordance with the Flora and Fauna Management Plan. Tree of heaven and blackberry infestations were noted to be controlled and no evidence of new growth of these species during the biannual inspection in December 2016.	Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site	Appendix D

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
	From Section 2.2 (b) of the Preliminary Documentation Table 2.6 – Feral Animal Management	<p>Feral animal control is undertaken on an as needs basis across Northparkes holdings in accordance with the Flora and Fauna Management Plan. Northparkes also implements feral animal management in conjunction with our near neighbours (e.g. fox baiting programs).</p> <p>Additionally, feral animal monitoring was undertaken at the Kokoda Offset Site during biannual inspections undertaken in 2016.</p>	Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site	Appendix D
	From Section 2.2 (b) of the Preliminary Documentation Table 2.7 – Rehabilitation Management	<p>Rehabilitation works are to be undertaken as soon as practical following disturbance in accordance with Northparkes site disturbance procedures. Rehabilitation works are also outlined in the Northparkes Mine Operations Plan.</p> <p>Additionally, Northparkes is in the fourth year of a three year rehabilitation trials on Tailings Storage Facility 1 to establish the most appropriate capping and rehabilitation option for Tailings Storage Facility decommissioning. This trial has been undertaken in collaboration with the University of Queensland.</p>	Not applicable	Not applicable
	From Section 2.2 (b) of the Preliminary Documentation Table 2.8 – Biodiversity Monitoring and Reporting	A range of ongoing ecological monitoring is undertaken within Northparkes holding, both within the mining leases and at the offset sites. Annual monitoring of pine donkey orchid populations was undertaken within and surrounding the mining lease in 2016. Additionally, biodiversity monitoring was commenced at the Kokoda Biodiversity Offset Site in 2016. This included Landscape Function Analysis surveys, flora quadrats, winter and spring targeted bird surveys and biannual inspections.	<p>Appendix C 2016 Kokoda Biodiversity Offset Area Ecological Monitoring Report</p> <p>Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site</p> <p>Appendix E 2016 Bird Surveys (Winter and Spring)</p>	<p>Appendix C</p> <p>Appendix D</p> <p>Appendix E</p>

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
	From Section 2.2 (b) of the Preliminary Documentation Table 2.9 – Threatened Species Adaptive Management	Acknowledged, if an unexpected occurrence of a threatened species was recorded within the Northparkes Site, adaptive management to mitigate impacts to the species would be adopted in accordance with the Northparkes Flora and Fauna Management Plan. However, no new threatened species that were not assessed through the impact assessment process were recorded during clearing supervision surveys.	Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report Section 4.0	Appendix A

Table 2 Offsetting of residual impacts

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
4.	CONDITION VARIATION AS OF 25 FEBRUARY 2016 To compensate for the loss of 46 hectares of GBGW and the related and additional loss of habitat for other matters of national environmental significance (<i>Polytelis swainsonii</i> ; <i>Lathmus discolor</i> ; <i>Anthochaera phrygia</i>) the person taking the action must secure the offset lands as identified as the 'Kokoda Offset Site' in Section 2.3 of the Preliminary Documentation. These offset lands must be protected by a legal instrument under relevant legislation on the title within 12 months of the date of this variation [25 February 2016].	Northparkes purchased the Kokoda Offset Site in early 2015. Northparkes had commenced the process to obtain the VCA for Kokoda. The VCA was not executed by 30 June 2015 as per the consent due to additional biometric monitoring being required to satisfy OEH. A draft VCA has been prepared in 2016 and will be submitted in 2017. Variation granted to extend this time out till 25 August 2017.	Not applicable	Not applicable
5.	The instrument referred to in Condition 4 must: <ul style="list-style-type: none"> a) Provide for the legal protection of the land for the duration of the impact; b) Prevent any conflicting future development activities, including mining and mineral extraction; c) Ensure the active management of the land (in accordance with Condition 9). 	As per condition 4	Not applicable	Not applicable

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
6.	<p>CONDITION VARIATION AS OF 25 FEBRUARY 2016</p> <p>The person taking the action must provide evidence to the Department of their compliance with Condition 4, along with offset attributes, shapefiles and textual description and maps to clearly define the location and boundaries of the offset sites, within 1 month of the offset lands being protected under condition 4.</p>	<p>As per condition 4. Northparkes will forward offset attributes, shapefiles, textual descriptions and maps that clearly define the location and boundaries of the offset site in 2017 following receiving sign off of the VCA Agreement from OEH.</p>	<p>Not applicable</p>	<p>Not applicable</p>
7.	<p>THIS CONDITION HAS BEEN DELETED AS OF 25 FEBRUARY 2016</p>	<p>No action required</p>	<p>No documentation required</p>	<p>Not Applicable</p>
8.	<p>The area of land contained within the offset lands that are secured must include appropriate areas of the offset lands (consistent with the Department's EPBC Act offsets policy) for each of the matters of national environmental significance that are impacted by the action, as per Section 2.4.2 and Appendix 6 of the Preliminary Documentation.</p>	<p>The Kokoda Offset Site was purchased as an offset site as it contains areas of threatened ecological communities and suitable habitat for the threatened species that were potentially impacts by the Project.</p>	<p>Not applicable</p>	<p>Not applicable</p>
9.	<p>The offset lands ('Kokoda Offset Site') identified in Condition 4 must be managed to improve and maintain the condition of the offset lands to the satisfaction of the Department and achieve the conservation objectives of the affected lands, including:</p> <ul style="list-style-type: none"> a) Development of a suitable management plan for the offset land which specifies conservation objectives and how they are to be achieved. The conservation objectives must be clearly set out, measureable and consistent with the conservation management intent described in Section 2.3 of the Preliminary Documentation; b) Implementation of all management actions and conservation measures 	<p>Ecological monitoring has been conducted as per the Biodiversity Offset Management Plan and results recorded in Appendix C. Performance against primary completion indicators are provided in this report (based on ESG3 MOP Guidelines).</p> <p>Biannual inspections are conducted to assess fence integrity, track access, weed infestations and a qualitative assessment on regeneration. The information from the inspections in 2016 are contained in Appendix D Section 2.1.</p>	<p>Appendix C 2016 Kokoda Biodiversity Offset Area Ecological Monitoring Report Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site</p>	<p>Appendix C and D</p>

	Condition	Description of Actions Undertaken	Supporting documentation	Cross reference
	<p>c) Active management of derived native grassland areas (GBGW) to allow regeneration and full recovery of these areas of GBGW ecological community over time;</p> <p>d) Allocation of appropriate funding to achieve the conservation objectives;</p> <p>e) Regular monitoring against conservation objectives and adaptive management as appropriate to achieve the conservation objectives</p>			

Table 3 Reporting and auditing

	Condition	Action	Supporting documentation	Cross Reference
10.	<p>All survey data collected for the project, which relates to the identification and/ or conservation of matters of national environment significance, must be collected and recorded so as to conform to a reasonable standard such that it can be readily used by a third party or to data standards notified from time to time by the Department. When requested by the Department, the proponent must provide to the Department all species and ecological survey data and related survey information from ecological surveys undertaken for matters of national environmental significance. The survey data must be provided within 30 business days of the request, or in a timeframe agreed to by the Department in writing. The Department may use the survey data for various purposes, which relate to the promotion of environmental protection and biodiversity conservation.</p>	<p>Acknowledged, strict data management protocols have been used for the project. All ecological data collected as part of the project has been recorded using standard templates in the field, which have been scanned and then have been entered into excel spreadsheets. Additionally, all ecological data entry for the project has been undertaken by the Environment Advisor- Ecology to manage the consistency of data being entered and reduce the possibility of human error. Data will be provided to the Department on request. All documents produced for the project have been managed in accordance with the Northparkes Procedure for Document Control.</p>	Not applicable	Not applicable

	Condition	Action	Supporting documentation	Cross Reference
11.	Within 14 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement of the action.	Completed in 2015.	Not applicable	Not applicable
12.	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. The person taking the action must also notify any non-compliance with this approval to the Department in writing within two business days of becoming aware of the non-compliance.	The current report has been drafted to comply with condition 12 by addressing compliance with each condition in EPBC 2013/6788 individually.	Not applicable	Not applicable
13.	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Acknowledged. This condition will be fulfilled if requested by the Minister.	Not applicable	Not applicable

Table 4 Revisions

	Condition	Action	Supporting documentation	Cross Reference
14.	If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that plan. The varied activity shall not commence until the Minister has approved the revised plan in writing. The Minister will not approve a revised plan, unless the revised plan would result in an equivalent or improved environmental outcome. Of the Minister approves the revised plan that plan must be implemented in place of the plan originally approved.	Acknowledged. Actions relating to the project have been undertaken in accordance to Northparkes Management Plans. Additionally, any project changes would be managed in accordance with the Northparkes Procedure for Management of Change.	Not applicable	Not applicable
15.	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and communities or listed migratory species to do so, the Minister may request that the person taking the action make specified revision to the relevant management plan specified in the conditions and submit the revised plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approval plan must be implemented. Unless the Minister has approved the revised plan then the person taking the action must continue to implement the originally approved plan, as specified in the conditions.	Acknowledged. At the time of writing, the Minister has not made any requests that Northparkes make specific revisions to management plans relevant to EPBC 2013/6788.	Not applicable	Not applicable
16.	If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, the person taking the action must not substantially commence the action without the written agreement of the Minister.	The action as approved under EPBC 2013/6788 commenced in early 2015.	Not applicable	Not applicable

Table 5 Publication of plans

	Condition	Action	Supporting documentation	Cross Reference
17.	The person taking the action must maintain accurate records substantiating all activities and outcomes associated with or relevant to the above conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audit may also be publicised through general media.	Acknowledged. Accurate records have been kept for the activities undertaken to comply with EPBC 2013/6788. Also, all documents produced for the project have been managed in accordance with the Northparkes Procedure for Document Control.	Not applicable.	Not applicable

Appendix A Rosedale Drainage Preclearance and Clearing Supervision Report.

Appendix B Wood Donation to DPI and Nest Box Construction Information and Images



Plate 1 Logs being loaded onto the truck for transport to Macquarie River (left) and logs being placed in the river to create habitat for the nationally threatened Murry Cod (right)

Table 1 Nest box order to fulfil habitat augmentation requirements

Target species	Design source	Total ordered
Superb parrot (SU)	Birdlife Australia Nest Boxes – Technical Information Guideline (using guideline for galah based on information in Baker- Gabb, 2011)	67
Blue bonnet/ rosella (SP)	Birdlife Australia Nest Boxes – Technical Information Guideline (using guideline for eastern rosella)	3
Sugar glider (G)	Birdlife Australia Nest Boxes – Technical Information Guideline (using guideline for sugar glider)	3
Micro bat sp. (B)	Birdlife Australia Nest Boxes – Technical Information Guideline (using guideline for bat sp.)	3
Brush-tailed possum (P)	Birdlife Australia Nest Boxes – Technical Information Guideline (using guideline for brush tailed possum)	2
Total		78



Plate 2 Nest boxes for the project were constructed by the Parkes Men's Shed

Appendix C 2016 Kokoda Biodiversity Offset Area Ecological Monitoring Report

Appendix D 2016 Biannual Inspection Report for the Kokoda Biodiversity Offset Site

Appendix E 2016 Bird Surveys (winter and spring)