



Northparkes Mines

# **Administration Warehouse Statement of Environmental Effects**

October 2009

Project - Review and approved by

Signature

Title

Elsie Joubert, Procurement Superintendent

Date

14 October 2009

Environment - Review and approved by

Signature

Title

Kerrie Edwards, Manager - ESHCF

Date

14 October 2009

## TABLE OF CONTENTS

<b>1.0</b>	<b>Introduction</b>	<b>1</b>
1.1	Background	1
1.2	Existing Development	2
1.3	Site Location	2
1.4	Surrounding Land Uses	2
1.5	Applicant	2
<b>2.0</b>	<b>Subject Land</b>	<b>5</b>
2.1	Location, Title and Zoning	5
2.2	General Site Description	7
2.3	Services	7
<b>3.0</b>	<b>The Proposal</b>	<b>8</b>
3.1	Proposed Development	8
3.2	Proposed Activities	8
3.3	Site Access	9
3.4	Site Planning	9
3.5	Construction Equipment	9
3.6	Working Hours	9
<b>4.0</b>	<b>Town Planning Considerations</b>	<b>11</b>
4.1	Planning legislation and policy	11
4.2	Development Control Plans (DCPs)	12
4.3	Regional Environmental Plans	12
4.4	State Environmental Planning Policies	12
4.5	NSW Environmental Legislation	13
4.6	Commonwealth Environmental Legislation	16
<b>5.0</b>	<b>Environmental Assessment</b>	<b>16</b>
5.1	Noise	16
5.2	Air Quality	17
5.3	Flora and Fauna	17
5.4	Hydrology and Water Quality	17
5.5	Traffic	18
5.6	Heritage	18
5.7	Contaminated Land	18
5.8	Chemicals and Hazardous Substances	19
5.9	Waste Minimisation and Management	19
5.10	Natural Resource Use	19
5.11	Visual Assessment	20
5.12	Landuse Impacts	20
5.13	Community Impacts	20
5.14	Construction Management	20
<b>6.0</b>	<b>Conclusion</b>	<b>20</b>

## **LIST OF FIGURES**

<b>Figure 1</b>	<b>NPM Project Location</b>
<b>Figure 2</b>	<b>NPM Site Layout including proposed warehouse location</b>
<b>Figure 3</b>	<b>Warehouse Location Aerial Photograph</b>
<b>Figure 4</b>	<b>Warehouse Location Plan</b>

## **LIST OF TABLES**

<b>Table 1</b>	<b>Construction Plant and Equipment</b>
----------------	---

## **LIST OF PLATES**

<b>Plate 1</b>	<b>Laydown area looking north</b>
<b>Plate 2</b>	<b>Concentrate shed from proposed exit point</b>
<b>Plate 3</b>	<b>Existing open air racking</b>
<b>Plate 4</b>	<b>Vegetation to be retained</b>
<b>Plate 5</b>	<b>Laydown area from proposed entrance</b>
<b>Plate 6</b>	<b>Laydown area overview looking west</b>

## **LIST OF APPENDICES**

<b>Appendix 1</b>	<b>Detailed Plans of Proposed Warehouse</b>
-------------------	---

## **1.0 INTRODUCTION**

This Statement of Environmental Effects (SEE) supports a Section 75W application from North Mining Limited to modify its existing development consent (DC 06-0026) to operate a copper and gold mine at Parkes, NSW.

Northparkes Mines (NPM) is located 27 km north-northwest of Parkes. The current and approved operation is predominantly underground operations supplemented by open cut mining campaigns. Its associated processing plant is focused on the production of copper concentrate for distribution to overseas smelters.

The proposed modification considered in this SEE consists of the construction of a storage warehouse, including a concrete pad for vehicle unloading and minor road modifications. The proposed building would be constructed over an existing open air storage area.

The purpose of this SEE is to describe the proposal, to document the likely impacts of the proposal on the environment and to detail the mitigation measures that would be implemented to minimise the potential environmental impacts of the activity. The findings of this SEE will be considered by the NSW Department of Planning (DoP) when assessing the application.

It is acknowledged that certain constraints and issues will need to be considered in determining this application. These include the provision of infrastructure and services, impact on the surrounding area as well as environmental considerations.

A number of safeguards have been incorporated to reduce the impact of the proposed development on the site and surrounding areas. Accordingly, the purpose of this document is to:

- Describe the existing environment;
- Outline the proposed development;
- Consider relevant statutory matters;
- Identify environmental considerations relating to the infrastructure; and
- Provide conclusions and recommendations for consideration by the DoP.

### **1.1 Background**

NPM currently stores spare parts and other equipment onsite in one main warehouse, two small sheds, an open air storage yard and an offsite warehouse in Parkes. The open air storage area currently stores equipment and critical spares for maintenance and the warehouse in Parkes requires materials re-handling offsite and then transport to site when required.

In order to improve management of critical equipment spares, NPM propose to increase the covered storage capacity on site by constructing a 1200 m<sup>2</sup> warehouse. The warehouse capacity would accommodate ~600 pallet positions with a maximum height of 4 pallets. The warehouse design will not include any internal offices or storage of hazardous and/or flammable materials.

The building will be located to the north of the existing concentrate building in an area currently used as a stores laydown yard. The warehouse would be used for

storage of all equipment spares required for the E48 underground project and all existing equipment currently held in the offsite warehouse in Parkes.

The warehouse will be built to comply with the Building Code of Australia (BCA). The structural design is to AS 4100. Load designs are to AS 1170.1 for live loads and AS 1170.2 for wind loads. The cladding complies with both AS 1562.1 and the BCA.

## **1.2 Existing Development**

The existing development is an active mine site consisting of underground and open cut mining operations, ore processing facilities and associated infrastructure.

The existing components of operations for which planning approval (DC 06-0026) has been sought and approved are included in Section 3.1.3 and Section 3.1.4 of the Section 75W Environmental Assessment report<sup>1</sup>.

## **1.3 Site Location**

NPM is located 27 kilometres north north-west of Parkes, New South Wales, as shown in Figure 1.

The proposed site of the warehouse is currently an open air laydown and storage yard. The proposed warehouse site relative to the main components of the NPM operations is shown in Figure 2.

## **1.4 Surrounding Land Uses**

Areas immediately surrounding the proposed warehouse are industrial in nature, consisting of mining and ore processing infrastructure including a concentrate storage shed, health and training centre, maintenance workshop, main warehouse and open air laydown yard.

Land use beyond the mining operation's boundary is agricultural in nature, of which ~4,400 ha of the surrounding agricultural land is owned and managed by NPM.

## **1.5 Applicant**

North Mining Limited  
ABN: 78 000 081 434

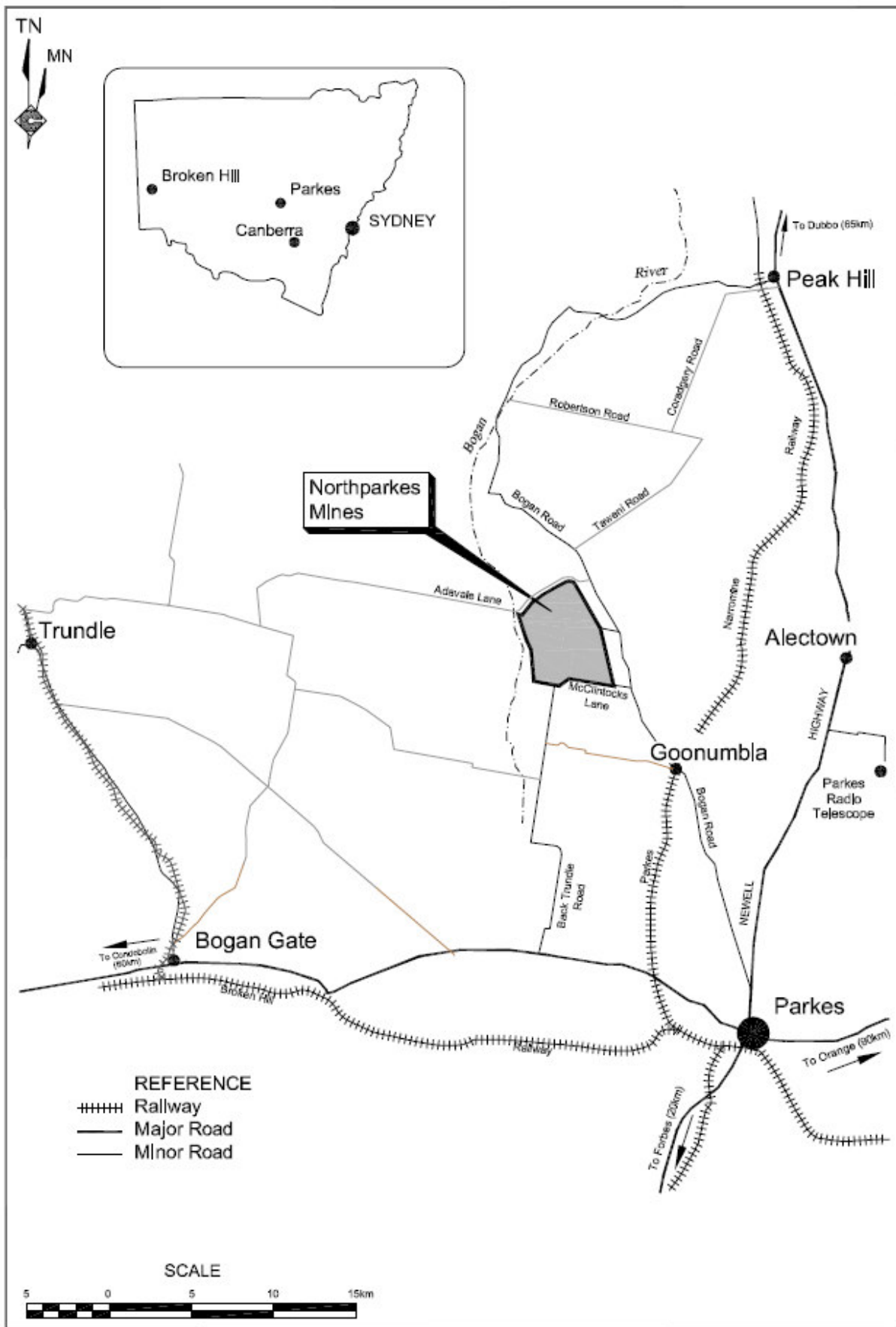
PO Box 995  
PARKES NSW 2870

Contact: Renee Morphet  
Environment and Community  
Superintendent

Email: [renee.morphett@riotinto.com](mailto:renee.morphett@riotinto.com)  
Phone: 02 6861 3529

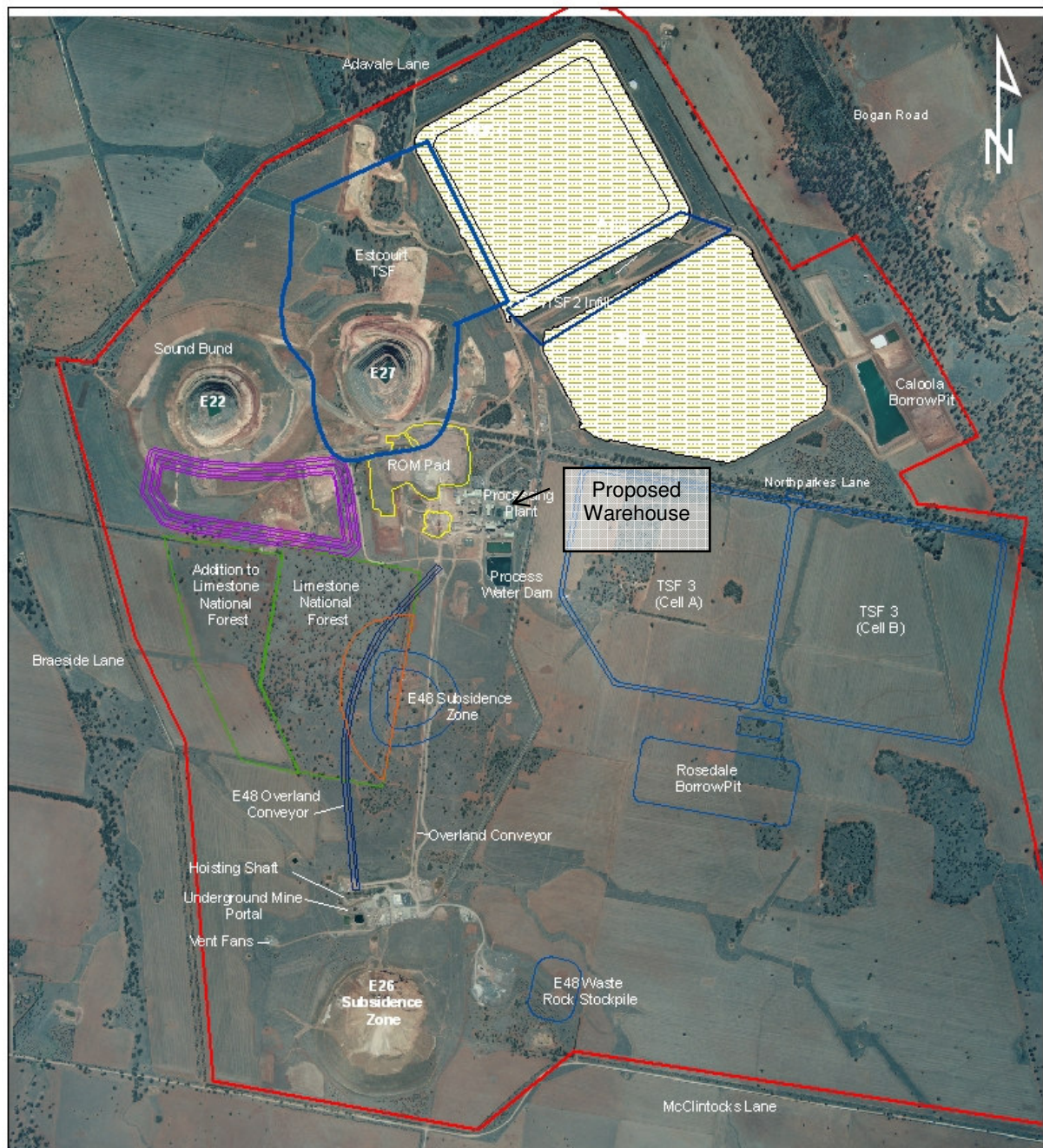
---

<sup>1</sup> GHD. (2009). Northparkes Mines Section 75W Environmental Assessment.



**Figure 1 NPM Project Location**





### Legend

- Site Boundary
- NPM - Landswap Area

**Figure 2      NPM Site Layout including proposed warehouse location**



## 2.0 SUBJECT LAND

### 2.1 Location, Title and Zoning

The subject land is identified as Northparkes Mines, Bogan Road, Goonumbla.

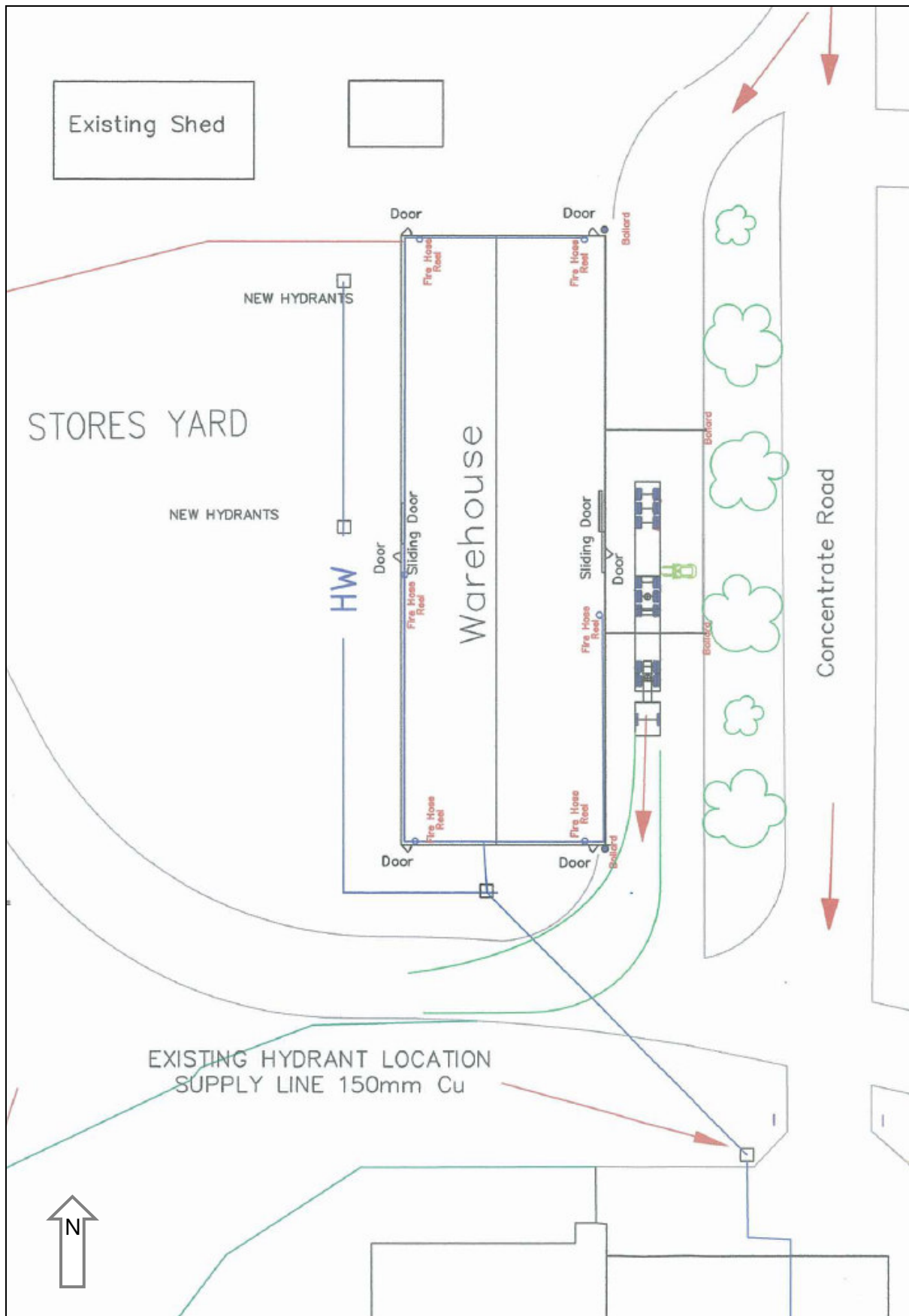
The land title description of the land specific to this application is Lot 41 in DP 1120299.

NPM is located in an area zoned “Rural” under Parkes Local Environmental Plan 1990 which records “mining” as a permissible land use in that zone.

A detailed aerial photograph indicating the proposed warehouse location is provided in Figure 3. Further detailed plans are provided in Figure 4 and Appendix 1.



**Figure 3 Warehouse Location Aerial Photograph**



**Figure 4 Warehouse Location Plan**

## **2.2 General Site Description**

The NPM operations involve the mining and processing of porphyry related copper-gold deposits on Mining Lease 1247 that covers an area of 1,630 hectares.

NPM operates both underground block cave mines and open-cut mines on its mining leases. Underground block cave operations include the E26 Lift 2 and Lift 2 North (Lift 2N) block caves as well as the E48 block cave project. Opencut mining campaigns have been undertaken in both the E22 and E27 pits.

Northparkes' ore is processed onsite to produce a high-grade copper concentrate which is then transported by road train to the Goonumbla rail siding approximately 13 kilometres from the mine. The concentrate is then railed to Port Kembla where it is then shipped to customers in Japan, China and India.

In addition to the above activities, NPM farms the bulk of its 6,115 ha landholding including much of the 2,456 ha of land within the two existing mining leases.

## **2.3 Services**

The NPM site is fully serviced for power, telecommunications, water and roads.

### **Roads**

The subject land is serviced by Northparkes Lane, from Bogan Road.

Access to site is limited to authorised persons only; a 20 km perimeter fence is located around the mine site and is signposted at regular locations. Access to operational areas is controlled by swipe card-operated boom gates, attended by access control personnel 24-hours seven days a week.

### **Water Supply**

Water is required at the site for the processing plant, mining activities, dust suppression and general potable water requirements. Water is supplied from various sources including fresh water supplied by Parkes Shire Council (PSC), water recovered from the TSFs and captured surface water runoff.

### **Sewerage**

Sewage is treated on site. All effluent is contained on site and re-used through the processing plant.

### **Electricity**

Electricity is supplied by Energy Australia through a 132 kV power line to the NPM site, fed from the Parkes 132 zone substation situated on the Parkes-Condobolin Road. NPM own and operate a 132 / 11 kV substation, 11 kV power lines and harmonic filter yard on site.

### **Telecommunication**

External telecommunications are provided by Telstra using the digital mobile and landline network. Internal communications on site are via portable VHF radios and telephones. The farm operation uses UHF communication and Telstra digital mobile phones.

## **3.0 THE PROPOSAL**

### **3.1 Proposed Development**

The proposed development includes the following:

- A standard steel warehouse 20 m wide and 60 m long with an eaves height of 5 m;
- A concrete pad 10 m wide and 24 m long to allow unloading of vehicles by forklift from both sides;
- Approximately 100 m of internal bitumen road connecting to existing internal access roads;
- Two 4x4 m sliding doors on the eastern side of the building and one 4x4 m sliding door on the western side of the building;
- Six single doors for personnel access and egress;
- Internal pallet racking; and
- Fire protection according to Australian Standards, including fire hose reels, emergency lighting, exit signage and access to hydrants.

The warehouse would use BlueScope Lysaght Colorbond Custom Orb cladding. Colours have been chosen to match existing ore processing and administration buildings with “Brunswick Green” roof and “Wheat” walls.

The warehouse capacity would accommodate ~600 pallet positions with a maximum height of 4 pallets. It would be integrated with the existing warehouse and storage areas on site and be managed by onsite operations personnel.

The warehouse will be built to comply with the Building Code of Australia (BCA). The structural design is to AS 4100<sup>2</sup>. Load designs are to AS 1170.1<sup>3</sup> for live loads and AS 1170.2<sup>4</sup> for wind loads. The cladding complies with both AS 1562.1<sup>5</sup> and the BCA.

Note that the building will not have any internal offices and not be used to store hazardous and/or flammable materials.

### **3.2 Proposed Activities**

The proposed development would require the following activities to be conducted:

- Site preparation (marking out the location proposed for the construction of the warehouse and connection of services);
- Excavation (excavation / trenching required to level the site and provide connection to existing services);
- Construction of access road;
- Erection, construction and commissioning of the warehouse;
- Installation of services such as power and water; and

---

<sup>2</sup> AS 4100:1998–Steel Structures

<sup>3</sup> AS 1170.1:2002–Structural design actions - Permanent, imposed and other actions

<sup>4</sup> AS 1170.2:2002–Structural design actions - Wind actions

<sup>5</sup> AS 1562.1:1992–Design and installation of sheet roof and wall cladding - Metal

- Site rehabilitation.

### 3.3 Site Access

Site access is via Parkes from Bogan Road and is restricted by a 24-hour attended access control point. All-weather access roads are provided on site and are detailed in plans in Appendix 1.

### 3.4 Site Planning

Stockpiles of construction spoil and other materials will be located in a manner that minimises the potential for impact to surrounding vegetation and will remain protected against the erosion of sediments and loss of other pollutants at all times.

The works required for the construction of the warehouse facility would be conducted under suitable contractual arrangements with NPM. The proposed works will be conducted under the procedures and work instructions described in the contractual documentation between NPM and any contractors engaged for the works.

The contractual documents should adequately consider and take into account the various environmental safeguards outlined within this SEE document.

### 3.5 Construction Equipment

The plant and equipment likely to be used during construction activities are listed in Table 1.

**Table 1 Construction Plant and Equipment**

• Backhoes	• Concrete trucks	• Compactors
• Dump trucks	• Excavators	• Light vehicles
• Pad foot rollers	• Loaders	• Mobile cranes
• Various hand held equipment, e.g. grinders, arc welders etc.		

### 3.6 Working Hours

NPM operates 24 hours, 7 days a week. Construction activities would be undertaken at any time, however any work that is expected to create noise levels above those of the adjacent ore processing operations will be undertaken during weekday daylight hours only.





**Plate 1 Laydown area looking north**



**Plate 2 Concentrate shed from proposed exit point**



**Plate 3 Existing open air racking**



**Plate 4 Vegetation to be retained**



**Plate 5 Laydown area from proposed entrance**



**Plate 6 Laydown area overview looking west**

## **4.0 TOWN PLANNING CONSIDERATIONS**

### **4.1 Planning legislation and policy**

#### **4.1.1 *Environmental Planning & Assessment Act 1979***

All development in NSW is assessed in accordance with the provisions of the *Environmental Planning & Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (the Regulation). The EP&A Act institutes a system for environmental planning and assessment, including approvals and environmental impact assessment for proposed developments. The EP&A Act contains several Parts that impose requirements for planning approval. These are as follows:

- Part 3A provides for control of “major infrastructure or other projects” that require approval from the Minister for Planning;
- Part 4 provides for control of “local development” that requires development consent from the local council; and
- Part 5 provides for control of various other “activities” that do not require development consent or the approval of the Minister for Planning.

This proposal is subject to assessment under Part 3A of the EP&A Act, as this category of development is listed under State Environmental Planning Policy (Major Projects) and Minister for Planning has declared this proposal to be part of a Major Project.

Section 75W of the EP&A Act provides a mechanism to modify approvals granted under Part 3A. Section 75W(2) states that the “Minister’s approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part”. As Department of Planning has determined that the proposal is inconsistent with the existing approval, this application will be submitted to modify the approval. The proposed modification is a project to which Part 3A of the EP&A Act applies.

The Minister for Planning is the approval authority for this proposal, and this SEE is required to support the application for project modification in accordance with the requirements of the EP&A Act. The SEE provides:

- Information on the proposal, including the need for the proposal;
- An assessment of the potential key environmental impacts of the proposal; and
- The proponent’s commitments to minimise and manage potential impacts.

#### **4.1.2 *Parkes Local Environmental Plan 1990***

The *Parkes Local Environmental Plan 1990* is the principal environmental planning instrument for all land within the Parkes Shire. The land affected by this proposal is zoned 1(a) Rural “A”. Clause 9 of the LEP defines the following classes of development within the 1(a) – Rural zone:

- Permitted without consent is Agriculture (other than ancillary dwellings and intensive livestock keeping establishments); forestry (other than ancillary dwellings and pine plantations).
- Prohibited are motor showrooms; residential flat buildings; shops (other than general stores).



- Permitted only with consent is any purpose other than a purpose included above.

Therefore mining or the construction of a warehouse would be considered permissible with consent.

## **4.2 Development Control Plans (DCPs)**

There are no Development Control Plans or other Council policies that are known to apply to this proposed development.

## **4.3 Regional Environmental Plans**

There are no Regional Environmental Plans that apply to this proposed development.

## **4.4 State Environmental Planning Policies**

### **4.4.1 *State Environmental Planning Policy No 44—Koala Habitat Protection***

SEPP 44 encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range. The policy applies to 107 local government areas. Local councils cannot approve development in an area affected by the policy without an investigation of core koala habitat. The policy provides the state-wide approach needed to enable appropriate development to continue, while ensuring there is ongoing protection of koalas and their habitat.

A search of the NSW Wildlife Atlas shows the closest koala sighting in the last 20 years to the subject site was approximately 5 km to the west along McClintock's Lane between 2004 and 2006. The next closest sighting in the last 20 years was approximately 20 km away near Peak Hill in 1992. No Koalas have been sighted on the mine site and it is unlikely that this species would use the area as it is a highly modified site.

### **4.4.2 *State Environmental Planning Policy No. 55 – Remediation of Land***

SEPP 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. In particular, this policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed.

Prior to development as a stores laydown area for non-hazardous materials as part of the mining operations, the site was open farmland. There is no direct evidence that the subject land has ever been used for any potentially contaminating agricultural or industrial activity. Further land contamination investigation is therefore not considered warranted in this case.

No other State Environmental Planning Policies contain any specific requirements that would be relevant to the activities proposed at any of the subject site.

#### **4.4.3 State Environmental Planning Policy (Major Projects) 2005**

SEPP Major Projects was gazetted on 25 May 2005 and applies to all projects satisfying nominated criteria made following this date.

As identified in Schedule 1 for Part 3A projects, the activities carried out on site are classified as a Group 2 development, i.e. mining, petroleum production, extractive industries and related industries. As such, the planning approval application for the proposed development would be assessed through the Part 3A process of the EP&A Act.

#### **4.4.4 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007**

The Mining SEPP recognises the importance to New South Wales of mining, petroleum production and extractive industries. Clause 10 of the Mining SEPP specifies exempt development. Clause 10(2)(e) provides for the construction of a shed, however the size of the proposed warehouse exceeds the size limits for a shed exempt from development consent under this SEPP.

Therefore the DoP have determined that a modification is required to the current approval under section 75W of the EP&A Act.

### **4.5 NSW Environmental Legislation**

#### **4.5.1 Protection of the Environment Operations Act 1997**

The *Protection of the Environment Operations Act 1997* (POEO Act) establishes New South Wales's environmental regulatory framework and determines whether an environment protection licence may be required.

Activities that require a licence to be issued under the POEO Act are defined as a "scheduled activity" and are listed under Schedule 1 of the Act. Scheduled activities include those with the greatest potential to harm the environment, such as heavy industry, electricity generation, sewage treatment and other potentially offensive infrastructure such as waste treatment and/or storage facilities.

NPM currently hold an Environment Protection Licence under the POEO Act, the proposed development would not impact on the licensed scheduled activities and would be managed within the current conditions applicable to the site. Therefore a variation to the licence under the POEO Act is not required.

#### **4.5.2 Threatened Species Conservation Act 1995**

The *Threatened Species Conservation Act 1995* (TSC Act) lists a number of factors to be taken into account in deciding whether there is likely to be a significant impact on threatened species, populations or ecological communities or their habitats.

In accordance with the TSC Act a Species Impact Statement (SIS) would be required whenever it has been determined by an Assessment of Significance (undertaken in accordance with Section 5A of the EP&A Act) that there is likely to be a significant impact on a threatened species, population or ecological community.

An SIS is not required in this case, as the proposed development would not impact on any threatened species, endangered ecological communities or their habitats that are protected under the TSC Act.

#### **4.5.3 *Native Vegetation Act 2003***

The *Native Vegetation Act 2003* aims to end broad scale clearing (clearing of remnant native vegetation or vegetation regrowth) unless it maintains or improves the environment. The Act is intended to protect and promote the conservation of native vegetation.

The proposed development involves the construction of a warehouse on an existing cleared hardstand area and does not involve the clearing of any vegetation. Therefore no permits are required under the Act.

#### **4.5.4 *National Parks and Wildlife Act 1974***

The *National Parks and Wildlife Act 1974* (NPW Act) provides the basis for legal protection and management of Aboriginal sites within NSW. The implementation of the Aboriginal heritage provisions in the Act is the responsibility of the Department of Environment, Climate Change and Water (DECCW).

The NPW Act and the policies of the DECCW provide that:

- It is an offence to knowingly disturb an Aboriginal artefact or site without an appropriate permit;
- Prior to instigating any action which may conceivably disturb a 'relic', an archaeological survey and assessment is required; and
- When the archaeological resource of an area is known or can be reliably predicted, appropriate land use practices should be adopted which would minimise the necessity for the destruction of sites/relics and prevent the destruction of sites/relics that warrant conservation.

The proposed development is considered to be unlikely to uncover any indigenous heritage items given the extensively cleared and modified nature of the subject land. It is therefore unlikely that any approvals under the NPW Act would be required. However, should any indigenous heritage items be uncovered during the proposed works, the Act requires that all works in the vicinity of the material / item should cease until an assessment is made. In this event, procedures under NPM's approved Aboriginal Heritage Management Plan would be followed.

#### **4.5.5 *Heritage Act 1977***

The *Heritage Act 1977* identifies and protects heritage items and is administered by the NSW Heritage Council. Under the Act it is an offence to disturb an item of heritage significance without the consent of the Heritage Council. Any work that would impact on an item listed on the State Heritage Register or Interim Heritage Orders requires approval from the Heritage Council under section 60 of the *Heritage Act 1977*. Approval may also be required from the Heritage Council under section 139 of the *Heritage Act 1977* if it is proposed to disturb a relic.

A heritage “item” is defined as “a place, building, work, relic, moveable object or precinct”. Environmental heritage is defined as places, buildings, works, relics, moveable objects, and precincts of State or local heritage significance.

A heritage “relic” means “any deposit, object or material evidence: (a) which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) which is 50 or more years old”.

There are no items within the study area that are listed on the State Heritage Register or that are subject to an Interim Heritage Order. No approvals for the proposed development would therefore be required under Section 139 of the *Heritage Act 1977*.

#### **4.5.6 *Rivers and Foreshores Improvement Act 1948***

The *Rivers and Foreshores Improvement Act 1948* (RFI Act) provides for the carrying out of works for the removal of obstructions from and the improvement of rivers and foreshores and for the prevention of erosion of lands by tidal and non-tidal waters.

Under Part 3A of the RFI Act, a permit is required for any development that occurs within 40 metres of any river or stream bank, however no such watercourses exist within 40 metres, or otherwise within the immediate vicinity of the proposed development site. The proposal is therefore not subject to any requirements under Part 3A of the RFI Act.

#### **4.5.7 *Water Act 1912***

The *Water Act 1912* requires consultation with the NSW Office of Water with respect to proposals to extract waters for the purpose of water conservation, irrigation, water supply, drainage or for the changing of the course of any river. In certain circumstances, some provisions of the *Water Management Act 2000* and/or the *Rivers and Foreshores Improvement Act 1948* may also apply to such proposals.

Construction of the proposed warehouse would not require extraction of additional water resources. The proposed development is therefore not subject to any requirements under the *Water Act 1912*.

#### **4.5.8 *Waste Avoidance and Resource Recovery Act 2001***

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) is administered by the DECCW. The primary objectives of the WARR Act are to achieve reductions in waste volumes disposed of in NSW and to establish a hierarchy of avoidance, reuse, recycling and reprocessing, prior to disposal. The Act contains requirements in relation to disposal and transport of waste and prevents the disposal of waste on any land unless it is an approved waste facility.

NPM is required to comply with the requirements of the Act in relation to all waste management issues relevant to the construction and operation of the proposed warehouse.

## **4.6 Commonwealth Environmental Legislation**

### **4.6.1 *Environment Protection and Biodiversity Conservation Act, 1999***

The Commonwealth's environmental assessment procedures are conducted under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Under this legislation, any action that:

- Has a significant impact on a matter of National Environmental Significance (NES); or
- Has a significant impact on Commonwealth land.

If an action does not have one of these effects, it does not trigger the EPBC Act and assessment and Commonwealth approval is therefore not required.

The proposed development would not have any impact on any Commonwealth land and is also considered to be unlikely to have any significant impact (either direct or indirect) on any matter of NES. Therefore the proposal would not require referral to the Commonwealth Minister for the Environment and no approvals under the EPBC Act would be required.

## **5.0 ENVIRONMENTAL ASSESSMENT**

This Environmental Assessment included:

- A desktop assessment of existing documents relating to the construction of the proposed warehouse;
- A field assessment on 6 October 2009; and
- A desktop assessment of relevant NPM existing studies, management plans, strategies and procedures; and
- Consultation with NPM personnel.

### **5.1 Noise**

The intermediate topography around the site proposed for the warehouse consists of flat cleared land with significant ore processing infrastructure adjacent to the site. The nearest potentially sensitive site is the 'Hubberstone' property approximately 3 km from the proposed warehouse.

It is considered that the use of a warehouse to store spare parts would result in fewer disturbances to potentially sensitive noise receivers than the current open air storage that exists at the site.

The potential for this proposal to result in significant noise disturbance impacts on potentially sensitive noise receivers is considered to be negligible.

#### **Mitigation measures**

No specific noise mitigation measures are required for this proposal, however in order that any potential for disturbance to any sensitive noise receiver is further minimised, the following noise mitigation measures are recommended:

- Vehicles accessing the site should be kept properly serviced and fitted with appropriate mufflers;

- Where practical, all vehicular movements to and from the site should be made only during normal working hours; and
- Where practical, all machinery and vehicles used on site should be switched off when not being used, rather than left idling for prolonged periods.

## 5.2 Air Quality

Due to the nature of the proposal it is considered that it would not have any potential for air quality impacts.

### **Mitigation measures**

Although considered to be insignificant, any potential air quality impacts from this proposal may be appropriately managed through the implementation of the following management measures:

- Dust mitigation using water cart or other appropriate methods during construction, as required;
- No onsite equipment should be left running when not specifically required; and
- Individual vehicular trips to and from the warehouse site should be kept to a minimum.

## 5.3 Flora and Fauna

The proposed warehouse site is already a significantly disturbed area with the storage of spare parts and other materials on a hardstand area. A stand of eucalypts and acacias has been planted in a garden bed between an existing road and the laydown area (Plate 4). This stand of vegetation will be retained and not be impacted by the proposed development.

### **Mitigation Measures**

No trees will be disturbed by the proposed development. All works will be conducted outside the drip line of all trees.

## 5.4 Hydrology and Water Quality

The proposed warehouse would be constructed on an existing hardstand area. Minimal works would be required to address stormwater issues and all runoff from the area would be managed under NPM's existing Water Management Plan.

### **Mitigation Measures**

The following surface water management practices would be implemented to manage water around the proposed warehouse:

- Minimise contamination of surface waters by diverting clean water runoff from undisturbed areas away from the operations;
- Capture and treatment of dirty water from disturbed areas of the site through sediment ponds to allow suspended solids to settle out; and
- Capture of runoff from mining areas for reuse as process water.

## 5.5 Traffic

On an average day, 438 vehicle movements including 18% heavy vehicles enter or exit NPM<sup>6</sup>. Typically there are approximately 19 truckloads of consumables and supplies (i.e. 38 truck movements) per week, (16 deliveries and 3 dispatches), mostly via single trailer or single tanker trucks. Peak hour two way traffic flows on Bogan Road occur between 6:00 am and 7:00 am and 7:00 pm to 8:00 pm Monday to Friday with around 90 vehicles per hour as shift workers and some day workers travel to and from work. The remaining day workers predominantly commute between 7:00 am to 8:00 am and 4:00 pm to 5:00 pm, Monday to Friday. Weekend traffic is limited principally to contractors and shift workers.

Construction and operation of the warehouse is not expected to significantly increase vehicle movements to and from the NPM site. Some additional truck movements would be required for delivery of construction materials and some additional light vehicle movements for construction workers.

### Mitigation Measures

It is considered that the construction of the proposed warehouse will not create significant impacts in terms of traffic volume. No additional impact is anticipated during normal operation of the proposed warehouse. Accordingly, no additional mitigation measures are proposed.

## 5.6 Heritage

The site proposed for the warehouse is already significantly disturbed. No heritage sites are listed within the study area within any known heritage registers, nor under the Parkes LEP.

It is therefore considered that no items of potential heritage significance are expected to be impacted by this proposal.

### Mitigation Measures

Although it is considered that no items of potential heritage significance would be impacted by this proposal, nevertheless the following general recommendations for heritage management are made:

- All persons responsible for the management of any works on site should ensure that all staff, contractors and others involved in construction or maintenance related activities are made aware of the statutory legislation protecting sites and places of significance; and
- All staff should also be made aware that, if an object is found, all works shall cease and the procedures under the NPM Aboriginal Heritage Management Plan should be followed. No further work should commence until after any subsequent recommendations or requirements have been appropriately implemented.

## 5.7 Contaminated Land

Prior to development as a stores laydown area for non-hazardous materials as part of the mining operations, the site was open farmland. There is no direct evidence that the subject land has ever been used for any potentially contaminating agricultural or industrial activity.

---

<sup>6</sup> Transport and Urban Planning, 2006, Northparkes Mines - E48 Project Traffic Assessment



Any material excavated as a result of the proposed construction activities would not be removed offsite, the material excavated as part of this proposal would be re-used within the NPM operational area.

#### **Mitigation Measures**

It is considered that the construction of the proposed warehouse will not create significant impacts in terms of land contamination. Accordingly, no mitigation measures are proposed.

### **5.8 Chemicals and Hazardous Substances**

There would not be any significant use of hazardous substances or dangerous goods during construction of the proposed warehouse site. Storage of hazardous substances or dangerous goods would be confined to existing storage areas onsite.

#### **Mitigation Measures**

The presence of substances such as lubrication oils and motor fuels results in either the potential risk of fire or of pollution to land, water and air, if any uncontained spillage of such substances were to occur. NPM and any of its contractors must therefore comply with all legislation and standards for the safe handling and storage of hazardous substances and dangerous goods and meet all relevant occupational health and safety requirements.

All contractors should be required to develop and implement an appropriate Occupational Health and Safety Plan to apply to all their proposed activities or comply with NPM procedures and management practices. Any fuels or oils stored on-site during construction would be contained within an appropriately bunded area in accordance with the relevant storage guidelines contained in Australian Standard AS1940 for the Storage and Handling of Flammable and Combustible Liquids.

### **5.9 Waste Minimisation and Management**

Waste generated by the proposed activities would include some excavation spoil and general site litter only.

#### **Mitigation Measures**

Any soils that need to be cleared from the site would remain on-site for use in site rehabilitation or other beneficial use. General construction waste would be appropriately contained onsite and separated for either recycling or disposal at an appropriately licensed landfill site as required under NPM's existing Non-Mineral Waste Management Plan.

### **5.10 Natural Resource Use**

The use of natural resources is expected to be limited to the use of construction materials for the warehouse and the use of motor fuels for the transportation of staff and equipment on and off the site, during the construction / installation and operational phase of the proposal.

#### **Mitigation Measures**

No specific natural resource use mitigation measures are proposed.

### **5.11 Visual Assessment**

The architectural scale, visual bulk and colour of the warehouse will be consistent with that of the surrounding buildings. It will be located in the ore processing and administration area and will have a “Brunswick Green” roof and “Wheat” walls to match existing buildings.

No significant impacts to the local visual environment are reasonably anticipated as the site is not located on a visually prominent ridgeline and nor would it otherwise detract from the “particular scenic value” of the site in question. Photographs of the proposed warehouse site are provided in Plates 1 to 6 above.

#### **Mitigation Measures**

No specific measures to mitigate impacts to the local scenic environment are recommended.

### **5.12 Landuse Impacts**

The site is currently used for open air storage of similar items that would be stored in the proposed warehouse. No significant impacts to the existing landuse potential at the site are anticipated.

#### **Mitigation Measures**

No specific measures to mitigate impacts to local landuse potential are recommended.

### **5.13 Community Impacts**

The construction and operation of the warehouse would not be expected to have a negative impact on the community. It would be constructed within the footprint of the existing mining operations and not increase the demands on resources as it is for the storage of materials already required and used by NPM. There would be some beneficial impact on the community during construction of the project through the creation of approximately eight full time equivalent positions to build the warehouse.

#### **Mitigation Measures**

No specific measures to mitigate impacts to the community are recommended.

### **5.14 Construction Management**

All works required for construction of the warehouse would be conducted under the contractual arrangements between NPM and the nominated contractor. The contractual documents should adequately consider and take into account the various environmental safeguards outlined within this SEE document.

## **6.0 CONCLUSION**

This SEE has been prepared to assess the potential environmental impacts of the proposal to construct a warehouse north of the existing concentrate building in an area currently used as a stores laydown yard. The land is owned by NPM and will allow undercover storage of materials currently stored in the open and/or off site.

This proposal covers the construction and operation of the warehouse. The operation will be integrated with current storage facilities and management practices on site.

This assessment of the proposal has been undertaken in order to assist DoP with its requirements under Section 75W of the EP&A Act and provides an assessment of the potential impacts of the proposal. No significant impacts have been identified as part of this proposal.

Overall, the environmental impacts identified in this assessment have been shown to be minimal, as summarised below:

- The potential for significant noise disturbance is considered to be insignificant as the warehouse will be adjacent to existing ore processing facility and the nearest residence is located over 3 km away from the site;
- There would be no significant potential for air quality impacts, due to the nature of the proposal;
- Vegetation in the vicinity of the proposed warehouse will not be cleared and development will remain outside the dripline of any trees;
- No impacts on groundwater are anticipated. All surface water would be managed under NPM's existing Water Management Plan;
- Construction and operation of the warehouse is not expected to significantly increase vehicle movements to and from site;
- It has been identified that there would be no significant impact on any matters of National Environmental Significance and therefore no referral is required to be made to the Department of Environment, Water, Heritage and the Arts;
- No items of heritage significance are anticipated to be impacted by this proposal;
- No significant land contamination issues would be encountered at the site;
- There would not be any significant use of hazardous substances or dangerous goods on the site;
- Any soils cleared from the warehouse site would remain within the mining operation for use in site rehabilitation or other beneficial use;
- General construction waste would be separated for recycling or disposal at a licensed landfill;
- The use of natural resources is expected to be limited;
- No significant impacts to the local scenic environment are anticipated;
- No significant impacts to local landuse potential are anticipated; and
- Environmental safeguards will be implemented through contractual arrangements between NPM and the successful contractor with appropriate reference to the environmental safeguards and mitigation measures outlined in this SEE.

It is considered that, provided that the mitigation measures identified in this SEE are all appropriately implemented, the potential benefits afforded by the proposal are considered to be well within the public interest.

## **APPENDIX 1      Detailed Plans of Proposed Warehouse**