Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, as delegate for the Minister for Planning, approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:
- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Sam Haddad
Director-General

Sydney

SCHEDULE 1

Application Numbers:	07_0018
Proponent:	Broken Hill Operations Pty Ltd
Approval Authority:	Minister for Planning
Land:	See Appendix 1
Project:	Rasp Project

Red type represents the March 2012 Modification (Mod 1 - Ventilation Shaft)

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DEFINITIONS

Annual review	The review required by Condition 3 of Schedule 4
BCA	Building Code of Australia
Conditions of this approval	Conditions contained in Schedules 2 to 4 inclusive
Council	Broken Hill City Council
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department, or delegate
EA	*Rasp Mine Zinc-Lead-Silver Project: Environmental Assessment Report*, prepared by Broken Hill Operations Pty Ltd and dated July 2010
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under the POEO Act
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
Heritage Branch	Heritage Branch of the Department
I&I NSW	Department of Industry and Investment, trading as Industry and Investment NSW
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning and Infrastructure, or delegate
Mitigation	Activities associated with reducing the impacts of the project
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
POEO Act	*Protection of the Environment Operations Act 1997*
PPR	*Rasp Mine Zinc-Lead-Silver Project: Preferred Project Report*, prepared by Broken Hill Operations Pty Ltd and dated September 2010
Project	The development to which this approval applies
Proponent	Broken Hill Operations Pty Ltd
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment, and includes remediation
Response to Submissions`	*Rasp Mine Zinc-Lead-Silver Project: Response to Submissions Report*, prepared by Broken Hill Operations Pty Ltd and dated July 2010
RMS	Roads and Maritime Services
Site	The land listed in Appendix 1
Statement of Commitments	The Statement of Commitments reproduced in Appendix 5

SCHEDULE 2
ADMINISTRATIVE CONDITONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.

TERMS OF APPROVAL

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (b) Response to Submissions and PPR;
   (c) Statement of Commitments;
   (d) modification application 07_0018 Mod 1 and accompanying Environmental Assessment titled: *Rasp Mine, Zinc-Lead-Silver Project, Variation to Project, Relocation of Ventilation Shaft*, dated November 2011; and
   (e) conditions of this approval.

   Note to Condition 2: The general layout of the project is shown in Appendix 2.

3. If there is any inconsistency between the documents listed in condition 2 above, the most recent document in the relevant condition shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   (a) any reports, strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with the conditions of this approval; and
   (b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

Mining Operations

5. The Proponent may carry out mining operations on site until 31 December 2026.

   Note to Condition 5: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General and the Director-General of I&I NSW. Consequently, this approval will continue to apply in all respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

Production

6. The Proponent shall not extract more than 750,000 tonnes of ore per annum, or more than 8,450,000 tonnes of ore over the life of the project.

Transport

7. Until ore processing facilities have been constructed and commissioned on the site, the Proponent is permitted to transport crushed ore by road to the Endeavour Mine, or such other location approved by the Director-General, for processing. Following commissioning of the ore processing facilities, the Proponent shall only transport zinc and lead concentrates from the site by rail, except in an emergency situation and with the prior written approval of the Director-General.

STRUCTURAL ADEQUACY

8. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

   Notes to Condition 8:
   - *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and*
   - *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*

DEMOLITION

9. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures,* or its latest version.

OPERATION OF PLANT AND EQUIPMENT

10. The Proponent shall ensure that all the plant and equipment used on site, or to transport materials to and from the site, is:
    (a) maintained in a proper and efficient condition; and
    (b) operated in a proper and efficient manner.

STAGED SUBMISSION OF ANY STRATEGY, PLAN AND PROGRAM

11. With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

SURRENDER OF DEVELOPMENT CONSENTS

12. Within six months of the commencement of works the subject of this approval, the Proponent shall surrender all existing development consents applying to the site in accordance with sections 75YA and 104A of the EP&A Act.

SCHEDULE 3
ENVIRONMENTAL PERFORMANCE CONDITIONS

AIR QUALITY AND GREENHOUSE GAS

Odour

1. The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

Greenhouse Gas Emissions

2. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.

Air Quality Criteria

3. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause an exceedance of the criteria listed in Tables 1, 2 or 3 at any residence on privately-owned land.

Table 1: Long Term Criteria for Particulate Matter

Pollutant	Averaging Period	[d] Criterion
Total solid particles (TSP)	Annual	[a] 90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a] 30 µg/m^3

Table 2: Short Term Criterion for Particulate Matter

Pollutant	Averaging Period	[d] Criterion
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 50 µg/m^3

Table 3: Long Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level
[c] Deposited dust	Annual	[b] 2 g/m^2/month	[a] 4 g/m^2/month

Notes to Tables 1–3:

- [a] *Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources);*
- [b] *Incremental impact (i.e. incremental increase in concentrations due to the project on its own);*
- [c] *Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method;*
- [d] *Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with OEH.*

4. The Proponent shall ensure that the project is operated in a manner that does not exceed the criteria listed in Tables 4 and 5.

Table 4: Discharge Criteria for Point 1 – Ventilation Shaft

Pollutant	Units of Measure	Concentration Limit
Oxides of nitrogen (as NO_2)	Milligrams per cubic metre	350
Total solid particles (TSP)	Milligrams per cubic metre	20
[a] Type 1 and Type 2 substances	Milligrams per cubic metre	1
Volatile organic compounds (as n-propane)	Milligrams per cubic metre	40

Table 5: Discharge Criteria for Point 2 – Process Enclosure/ Baghouse Stack

Pollutant	Units of Measure	Concentration Limit
Total solid particles (TSP)	Milligrams per cubic metre	[b] TBD
[a] Type 1 and Type 2 substances	Milligrams per cubic metre	[b] TBD

Notes to Tables 4–5:

- *[a] Total of Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn and V;*
- *[b] TBD means that the limit must be proposed by the Proponent and agreed by the Director-General in consultation with OEH and be based on the results of post-commissioning test results. The limit must be proposed prior to the second sampling occurrence at Point 2; and*
- *reference conditions for the limits in Tables 4 and 5 are: dry, 273K and 101.3 kPa.*

Operating Conditions

5. The Proponent shall:
   (a) implement best practice dust management, including all reasonable and feasible measures to minimise dust emissions, including point source and fugitive emissions;
   (b) minimise any visible off-site dust generated by the project or the site; and
   (c) regularly assess real-time air quality monitoring and meteorological forecasting data and relocate, modify and/ or suspend operations to ensure compliance with the relevant conditions of this approval,
   to the satisfaction of the Director-General.

6. The Proponent shall seal and maintain the roads listed in Table 6 to the satisfaction of the Director-General. The roads shall be sealed prior to the commencement of ore extraction, unless otherwise agreed by the Director-General.

Table 6 Roads to be Sealed and Maintained

Road Status	Road	Approximate Length (m)
Existing	Front gate to truck wash	292
	'Diamond' intersection to core shed	360
	Front gate road to car park	132
New	Truck wash to haul road connection from Kintore Pit	690
	Kintore Pit intersection (truck wash and haul roads) to ROM pad (haul road for ore mine trucks)	1,186
	ROM pad to and through mill	354
	Mill to rail load out (concentrate trucks)	910
	Truck wash road to workshop	190
	Haul road to backfill plant	400

7. Ore crushing shall only be undertaken in a fully-enclosed structure that is designed, operated and maintained to ensure internal negative internal air pressure relative to ambient (external) conditions. The enclosure and associated emissions controls must be designed, constructed, operated and maintained to ensure that visible fugitive emissions from the enclosure are minimised.

8. A chemical dust suppressant shall be applied as per the manufacturer's specification, or more often as required, to all 'free areas' identified in the figure in Appendix 4.

9. All aboveground conveyors and transfer points prior to the grinding circuit (SAG and ball mills) shall be enclosed.

10. Video recording equipment shall be installed to assist in the active management of emissions from the tailings storage facility.

Air Quality Management Plan

11. The Proponent shall prepare and implement a detailed Air Quality Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with OEH and submitted to the Director-General for approval prior to the commencement of construction on the site;
    (b) identify all major sources of particulates and other air pollutants that may be emitted from the project, being both point source and diffuse emissions, including identification of the potential for lead contamination to be carried by these particulates;
    (c) include an air quality monitoring program that:
        - provides for periodic point source monitoring at Point 1 (Ventilation Shaft) and Point 2 (Process Enclosure/ Baghouse Stack);
        - provides for continuous ambient monitoring across an ambient air quality and dust monitoring network comprising no fewer than ten monitoring locations (Points 3 to 12) for total suspended particulates, PM_{10}, lead and dust deposition. Monitoring locations shall be informed by the outcomes of the air quality assessments presented in the EA and PPR and identified in consultation with OEH; and
        - provides for continuous meteorological monitoring using a meteorological monitoring statio located on the site;
        - is consistent with the requirements of *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* (DECC, 2007), the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment (Clean Air) Regulation 2010*.
    (d) pro-active and reactive management and response mechanisms for particulates with specific reference to measures to be implemented and actions to be taken to minimise and prevent potential elevated air quality impacts (including ambient air and deposited dust impacts) on surrounding land uses as a consequence of meteorological conditions, upsets within the project, or the mode of operation of the project at any time;
    (e) procedures and processes for monitoring ambient dust and deposited dust impacts;
    (f) provision for regular review of dust monitoring data, with comparison of monitoring data with that assumed and predicted in the documents referred to under Condition 2 of Schedule 2;
    (g) details of measures to be implemented to address any situation in which monitored dust impacts exceed those assumed and predicted in the documents referred to under Condition 2 of Schedule 2;
    (h) specific complaints management procedures in the event that dust monitoring indicates elevated off-site impacts;
    (i) procedures for the minimisation of dust generation on the site;
    (j) protocols for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions; and
    (k) a contingency plan should an incident, upset or other initiating factor lead to elevated dust impacts, whether above normal operating conditions or above environmental performance goals/ limits.

LEAD AWARENESS AND PUBLIC HEALTH

Contribution to Public Blood lead Monitoring & Public Education

12. During the implementation of the project, the Proponent shall make a reasonable contribution towards the cost of:
    (a) public health monitoring, particularly in relation to child blood lead levels; and
    (b) public education campaigns about the health risks associated with lead,
    to the satisfaction of the Director-General.

    Note: The Director-General will consult with the Director-General of the NSW Department of Health on the reasonableness of the proposed contribution prior to making any decisions under this condition, and determine the date upon which the contributions shall commence.

Lead Management Plan

13. The Proponent shall prepare and implement a Lead Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with the Lead Reference Group, including the NSW Department of Health (Western Area Health Service) and Council;
    (b) be submitted to the Director-General for approval by 30 June 2011;
    (c) outline the proposed commitment towards the cost of:
        - public health monitoring, particularly in relation to child blood lead levels, and tracking of this data over time; and
        - public education campaigns about the health risks associated with lead, including lead hygiene, lead and children, tank water lead risks and soil lead contamination risks.
    (d) identify additional reasonable and feasible measures that could be implemented either on site or in the areas adjoining the site to minimise the potential lead impacts of the project and “free areas”;

(e) include a program for the staged implementation of the measures identified in (d) above in the event that dust emissions are higher than predicted or the public health monitoring suggests further action is required to reduce blood lead levels in the environment surrounding the site; and
(f) include a detailed communication strategy, that outlines how the relevant dust and blood level monitoring data would be reported on the Proponent's website along with any relevant public education material.

Updated Human Health Risk Assessment

14. Within one year of the commencement of operation of the project, and every five years thereafter, unless otherwise agreed by the Director-General, the Proponent shall update the human health risk assessment prepared for the project and presented in the EA to the satisfaction of the Director-General. The updated risk assessment shall:
(a) be prepared by a suitably-qualified expert whose appointment has been endorsed by the Director-General;
(b) take into account monitoring data collected under this approval, and such other information as may be relevant to the assessment; and
(c) be submitted to the Director-General, OEH and the Western Area Health Service within one month of its completion.

NOISE AND VIBRATION

Construction Noise Restrictions

15. Construction activities associated with the project shall only be undertaken between 7:00am and 7:00pm on any day.

Note to Condition 15:
- *Construction activities include, but are not limited to, all construction work, front-end loader on the ROM pad, rock breaking and primary crushing in the process area, conveyors in the process area, flat-bed road truck haulage from the process area to the rail load-out area, locomotives at the rail load-out area and forklift at the rail load-out area.*

Operational Noise Restrictions

16. Operational activities associated with the project are permitted to occur at any time, subject to compliance with the noise limits specified in this approval, and subject to the following restrictions:
(a) crushing shall only occur between 7:00am and 7:00pm on any day;
(b) shunting of concentrate wagons shall only occur between 7:00am and 6:00pm on any day; and
(c) production rock blasting shall only occur between 6:45am and 7:15pm on any day.

Noise Limits

17. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 7.

Table 7: Operational Noise Criteria

Location	[a] Day (dB(A))	[b] Evening (dB(A))	[c] Night (dB(A))
A1 – Piper Street North	38	37	35
A2 – Piper Street Central	38	37	35
A3 – Eyre Street North	44	41	39
A4 – Eyre Street Central	44	41	39
A5 – Eyre Street South	44	41	39
A6 – Bonanza and Gypsum Streets	48	41	39
A7 – Carbon Street	35	35	35
A8 – South Road	48	39	39
A9 – Crystal Street	46	39	39
A10 – Barnet and Blende Streets	42	41	35
A11 – Crystal Street	46	39	39
A12 – Crystal Street	46	39	39
A13 – Eyre Street North 2	38	35	35
A14 – Piper Street North	35	35	35

Notes to Condition 17:

- *Receiver locations are as identified in the noise assessments presented in the EA and PPR;*
- *Noise limits are to be measured in accordance with the NSW Industrial Noise Policy (EPA, 2000);*
- *[a] Day is defined as 7:00am to 6:00pm Mondays to Saturdays and 8:00am to 6:00pm on Sundays and public holidays;*
- *[b] Evening is defined as 6:00pm to 10:00pm on any day; and*
- *[c] Night is defined as 10:00pm to 7:00 am Mondays to Saturdays and 10:00pm to 8:00am on Sundays and public holidays.*

Blasting Limits

18. The Proponent shall ensure that air blast overpressure generated by blasting associated with the project does not exceed the criteria listed in Table 8, when measured at the nearest affected residential or other sensitive receiver.

Table 8: Airblast Overpressure Criteria

Airblast Overpressure (dB(Lin Peak))	Allowable Exceedance
115	5% of the total number of blasts over a 12-month period
120	Never

19. The Proponent shall ensure that ground vibration generated by blasting associated with the project does not exceed the criteria listed in Table 9, when measured at the nearest affected residential or other sensitive receiver.

Table 9: Peak Particle Velocity Criteria

Peak Particle Velocity (mms^{-1})	Allowable Exceedance
5	5% of the total number of blasts over a 12-month period
10	Never

Noise Management Plan

20. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with OEH, and submitted to the Director-General for approval by the end of June 2011;
    (b) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system that employs both reactive and proactive mitigation measures;
    (c) include a noise monitoring program that:
        - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project; and
        - includes a protocol for determining exceedances of the relevant conditions of this approval;
    (d) describe the blast mitigation measures that would be implemented to ensure compliance with the relevant condition of this approval;
    (e) describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on-site; and
    (f) include a blast monitoring program to evaluate the performance of the project.

SOIL AND WATER

21. Except as may be expressly provided by an Environment Protection Licence issued under the *Protection of the Environment Operations Act 1997*, the Proponent shall comply with section 120 of that Act, which prohibits the pollution of waters.

Water Supply

22. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its water supply.

Note: The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.

Water Management Plan

23. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must be consistent with the Stormwater Management Plan presented as Annexure K to the EA, incorporate any changes to reflect the final detailed design of the project, and be prepared in consultation with OEH, NOW and I&I NSW. The plan must: be submitted to the Director-General for approval by the end of June 2011, and must include:
    (a) a Site Water Balance, which must:
        - include details of:
            - sources and security of water supply;
            - water use on site;
            - water management on site;
            - any off-site water transfers; and
        - investigate and implement all reasonable and feasible measures to minimise water use by the project;
    (b) an Erosion and Sediment Control Plan, which must:
        - identify activities that could cause soil erosion, generate sediment or affect flooding;
        - describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters, and manage flood risk;
        - describe the location, function and capacity of erosion and sediment control structures and flood management structures; and
        - describe what measures would be implemented to maintain the structures over time;
    (c) a Surface Water Management Plan, which must include:
        - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project;
        - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;
        - a program to monitor and assess:
            - surface water flows and quality;
            - impacts on water users;
            - stream health; and
            - channel stability.
    (d) a Groundwater Monitoring Program, which must:
        - provide a program to monitor seepage movement within and adjacent to the tailings storage facility;
        - include details of parameters and pollutants to be monitored for:
            - water from mine dewatering;
            - groundwater locations to the east of TSF1;
            - surface water represented by Horwood Dam;
            - water captured by the toe drains of the tailings storage facility;
            - water seepage from the tailings storage facility; and
            - the background local groundwater system.
        - outline performance parameters against monitoring data will be compared to determine whether seepage is occurring, and whether an unacceptable impact on local groundwater may be occurring;
        - include details of contingency measures to be implemented in the event that an unacceptable impact is identified.

TRANSPORT

24. The Proponent shall maintain the existing 66 carparking spaces, or an equivalent number elsewhere on the site, for the duration of the project.

25. The Proponent shall consult with the RMS and BHCC in relation to the footpath modifications required at the Eyre Street site access and shall address the design requirements of those agencies in relation to those works. All footpath works shall be completed prior to the commencement of operation of the project, and shall be undertaken at no cost to the RMS or BHCC.

26. A truck waiting area with capacity to accommodate at least two B-Double vehicles at any time shall be provided inside the Eyre Street site access to avoid trucks queuing into Eyre Street.

27. If the Holten Road site access is required during construction of the project, the Proponent shall, prior to using this access, consult with and address the requirements of the RMS and Council with respect to traffic access at this location.

28. The Proponent shall commission dilapidation reports for roads likely to be affected by the construction of the project, prior to the commencement of construction and immediately prior to completion of construction. The Proponent shall fund rectification of any deterioration of road pavement quality as a result of construction-related traffic.

Traffic Management Plan

29. The Proponent shall prepare and implement a traffic management plan to the satisfaction of the Director-General. The plan shall focus on traffic management during construction of the project, and must be developed in consultation with the RMS and Council. The plan must be submitted for the approval of the Director-General prior to the commencement of construction.

HERITAGE

30. The Proponent shall prepare and implement a Conservation Management Plan for the site to the satisfaction of the Director-General. This plan must provide a strategic framework for all heritage items located on the Lease, based on the principles of the Burra Charter, and developed in consultation with the Department (Heritage Branch) and Council. The plan must be submitted for the approval of the Director-General by December 2011.

VISUAL AMENITY

31. The Proponent shall:
    (a) minimise the visual impacts, and particularly the off-site lighting impacts, of the project;
    (b) take all practicable measures to further mitigate off-site lighting impacts from the project; and
    (c) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting*, or its latest version,

    to the satisfaction of the Director-General.

WASTE

32. The Proponent shall:
    (a) minimise the waste generated by the project; and
    (b) ensure that the waste generated by the project is appropriately stored, handled, and disposed of,

    to the satisfaction of the Director-General.

33. The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with I&I NSW, and submitted the Director-General for approval by the end of March 2011;
    (b) identify the various waste streams of the project;
    (c) estimate the volumes of tailings and other waste material that would be generated by the project;
    (d) describe and justify the proposed strategy for disposing of this waste material;
    (e) describe what measures would be implemented to meet the requirements set out above in condition 32; and
    (f) include a program to monitor the effectiveness of these measures.

REHABILITATION

Rehabilitation Objectives

34. The Proponent shall:
    (a) carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance; and
    (b) achieve the following rehabilitation objectives:
        - sealing and/ or treating 'free areas' of the site and other potential sources of wind-blown dust to prevent the emission of dust following closure;
        - preserving the heritage value of the site; and
        - making the site suitable for commercial and/ or educational uses,

    to the satisfaction of the Director-General of I&I NSW.

Rehabilitation Management Plan

35. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director-General of I&I NSW. This plan must:
    (a) be prepared in consultation with the Department, OEH, NOW, Council and I&I NSW;
    (b) be prepared in accordance with relevant I&I NSW guidelines;
    (c) be generally consistent with the closure concept presented in the EA;
    (d) reflect the aims of rehabilitation and closure to:
        - retain heritage items, as agreed by relevant regulators;

- manage stormwater to minimise erosion and restrict the potential for off-site pollution;
- provide final landforms that are safe, stable and sympathetic to the mining heritage of Broken Hill;
- minimise the generation of dust and adequately contain potentially hazardous materials within the landform; and
- install barriers to restrict access to potentially hazardous locations (eg decline, shafts or open cut pits);

(e) build, to the maximum extent practicable, on the other management plans required under this approval; and

(f) be submitted to the Director-General of I&I NSW for approval by the end of December 2011.

SCHEDULE 4
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:
   (a) be submitted to the Director-General for approval by the end of June 2011;
   (b) provide the strategic framework for the environmental management of the project;
   (c) identify the statutory approvals that apply to the project;
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
   (e) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
      - receive, handle, respond to, and record complaints;
      - resolve any disputes that may arise during the course of the project;
      - respond to any non-compliance; and
      - respond to emergencies; and
   (f) include:
      - copies of any strategies, plans and programs approved under the conditions of this approval; and
      - a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with relevant guidelines, and include:
   (a) detailed baseline data;
   (b) a description of:
      - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
      - any relevant limits or performance measures/criteria; and
      - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
   (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
   (d) a program to monitor and report on the:
      - impacts and environmental performance of the project; and
      - effectiveness of any management measures (see (c) above);
   (e) a contingency plan to manage any unpredicted impacts and their consequences;
   (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
   (g) a protocol for managing and reporting any:
      - incidents;
      - complaints;
      - non-compliances with the conditions of this approval and statutory requirements; and
      - exceedances of the impact assessment criteria and/or performance criteria; and
   (h) a protocol for periodic review of the plan.

   Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

3. By the end of June 2012, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
   (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
   (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:
      - relevant statutory requirements, limits or performance measures/criteria;
      - monitoring results of previous years; and
      - relevant predictions in the documents referred to in Conditions 2 of Schedule 2;

(c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
(d) identify any trends in the monitoring data over the life of the project;
(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
(f) describe what measure will be implemented over the next year to improve the environmental performance of the project.

Revision of Strategies, Plans & Programs

4. Within three months of:
(a) the submission of an annual review under Condition 3 above;
(b) the submission of an incident report under Condition 5 below;
(c) the submission of an audit report under Condition 7 below, or
(d) any modification of the conditions of this approval (unless the conditions require otherwise),
the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

REPORTING

Incident Reporting

5. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within seven days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

Regular Reporting

6. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans or programs of the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

7. By the end of December 2011, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
(b) include consultation with the relevant agencies;
(c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
(d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate
(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.

8. Within six weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

9. From the end of March 2011, the Proponent shall:
(a) make copies of the following publicly available on its website:
- the documents referred to in Condition 2 of Schedule 2;
- all current statutory approvals for the project;
- all approved strategies, plans and programs required under the conditions of this approval;
- the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans or programs;
- a complaints register, updated on a monthly basis;

- the annual reviews of the project;
- any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit; and
- any other matter required by the Director-General;

(b) keep this information up-to-date,

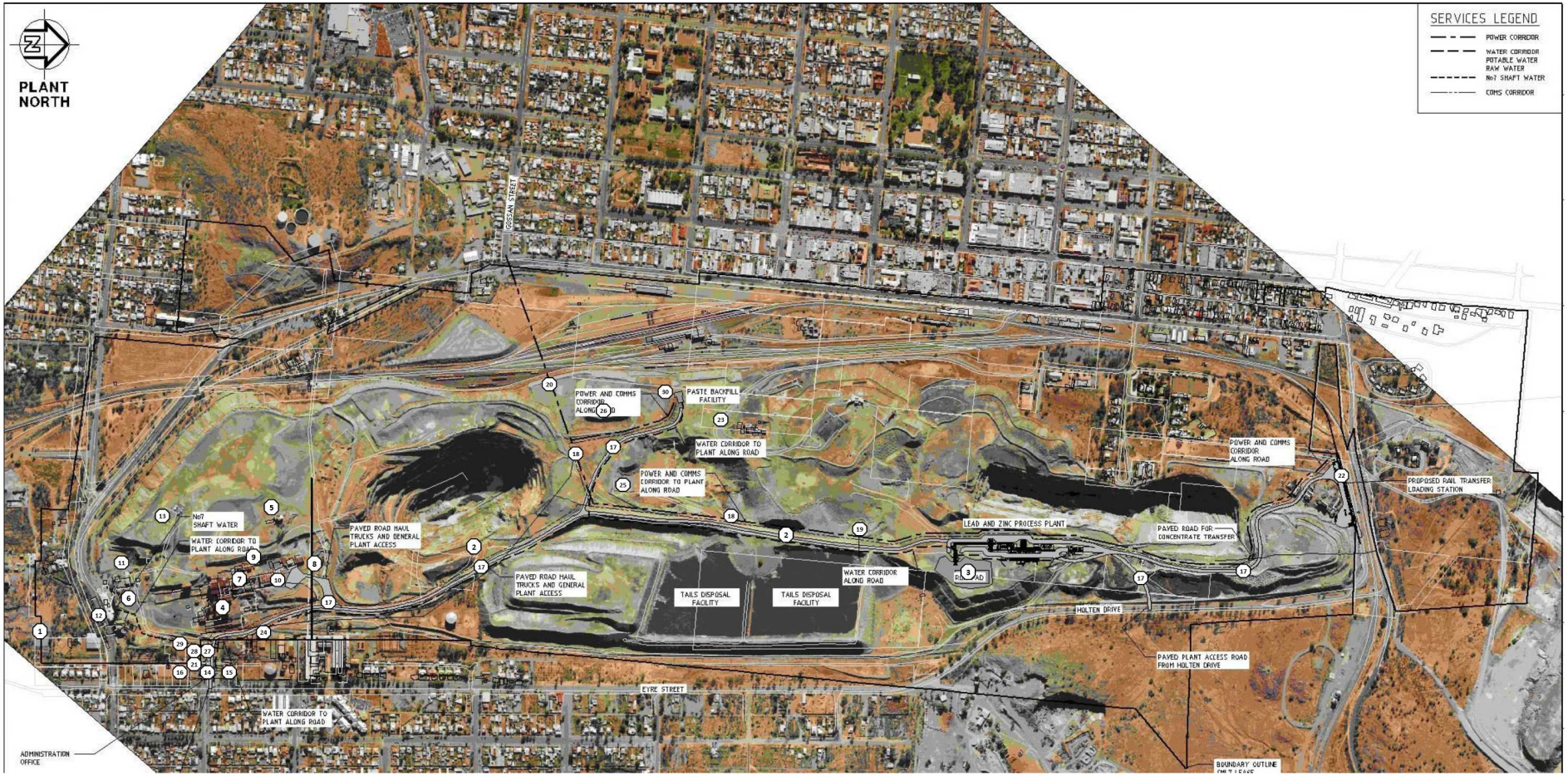
to the satisfaction of the Director-General.

APPENDIX 1
SCHEDULE OF LAND

Mineral Authorities/ Lot Number	Deposited Plan Number
CML 7	-
MPL 183	-
MPL 184	-
MPL 185	-
MPL 186	-
EL 5818	-
1	26/ 758018
2	26/ 758018
3	26/ 758018
4	26/ 758018
5	26/ 758018
6	26/ 758018
7	26/ 758018
8	26/ 758018
9	26/ 758018
10	26/ 758018
17	26/ 758018
1	809279
2	809279
1	134676
2	134676
3	134676
11	725393
675	761716
1790	757298

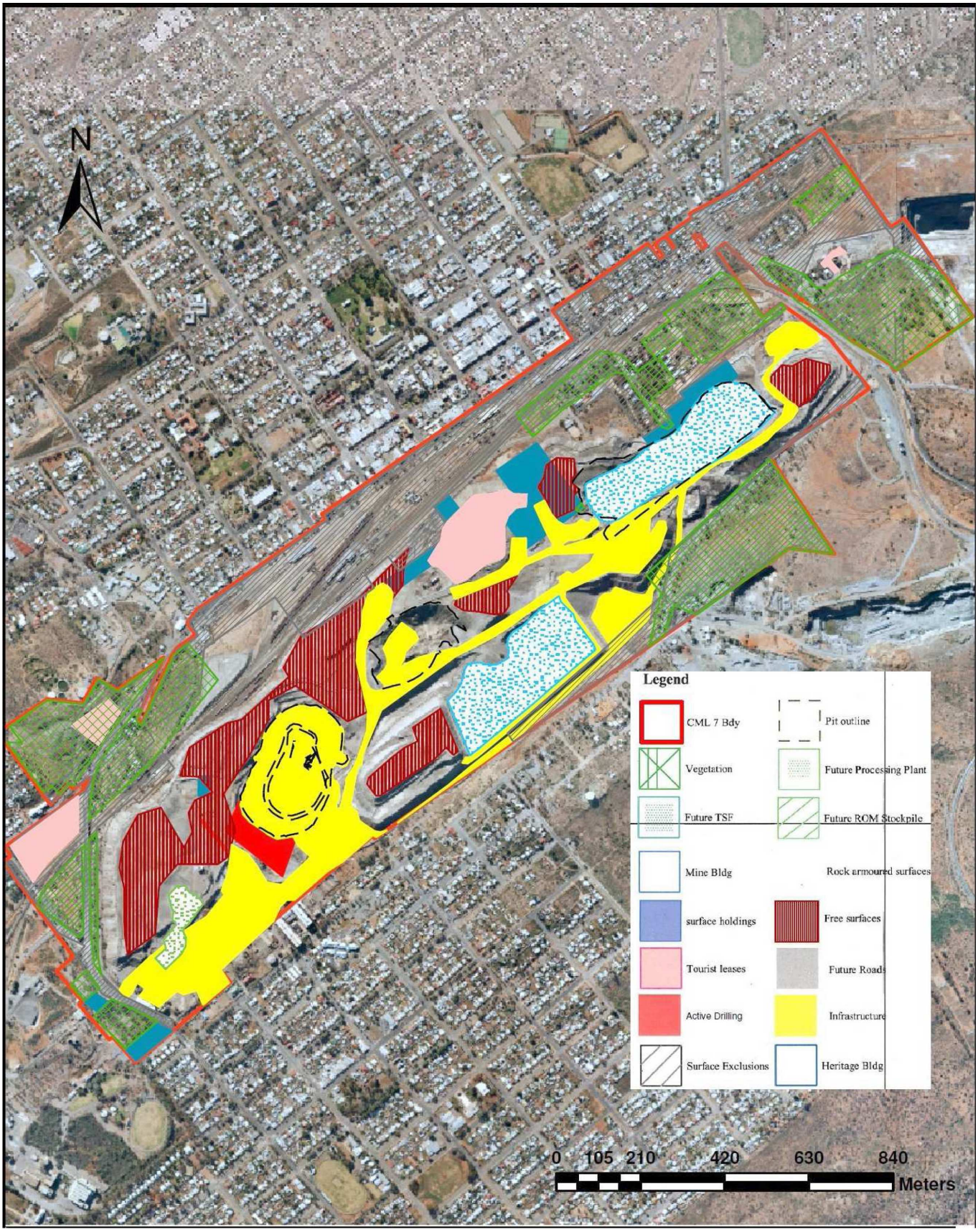
APPENDIX 2
PROJECT AREA

APPENDIX 3
PROJECT LAYOUT PLANS



1 – CML 7 Boundary	2 – Haul Road	3 – ROM Pad	4 – Old Concentrator Building	5 – Old Sand Fill Plant
6 – Old No. 7 Shaft	7 – Old No. 1 Shaft	8 – Old No. 6 Shaft	9 – Electrical Workshop	10 – Maintenance Workshop
11 – Core Shed	12 – Old No. 7 Underground Offices	13 – Telecommunications Compound	14 - CBH Main Offices	15 – Radford House (additional offices)
16 – Bowling Green	17 – Access Roads	18 – Pipe Corridor	19 - Proposed Decant Pond	20 – Proposed 22kV Power Supply
21 – Current Eyre St 22kV Power Supply	22 – New Railway Siding	23 – Access Road to Broken Earth Cafe	24 – Truck Wash	25 – Surface Magazines
26 – Ventilation Exhaust Rise	27 – Temporary Change Rooms	28 – New Change Rooms	29 – Car Park	30 – Backfill Plant

APPENDIX 4
PLAN OF FREE AREAS



APPENDIX 5
STATEMENT OF COMMITMENTS

REVISED STATEMENT OF COMMITTMENTS

INTRODUCTION

BHOP has made a number of commitments for managing potential environmental impacts of the Project. These commitments along with other management and mitigation measures were documented in the following sections of the EAR:

- Stakeholder Engagement, *Section 4.10;*
- Noise and Vibration, *Section 7.5;*
- Air Quality and Greenhouse Gas, *Section 8.3;*
- Water Resources, *Section 10.6 and 10.7;*
- Heritage, *Section 11.5;*
- Visual Amenity, *Section 13.5;*
- Traffic and Transport, *Section 14.5;*
- Waste Management, *Section 15.3;*
- Rehabilitation and Closure *Sections 17.3 and 17.4.*

The draft Statement of Commitments provided in Section 18 of the EAR has been revised to consider the issues raised in the response to submissions. The revised Statement of Commitments details the measures proposed by BHOP for environmental mitigation, management and monitoring of the Project. Amendments and additions to the draft Statement of Commitments have been marked in yellow.

If approval is granted under Part 3A of the EP&A Act, BHOP will commit to the following actions and controls.

STAKEHOLDER ENGAGEMENT

BHOP is committed to ongoing consultation with stakeholders and the local Broken Hill community. BHOP believes the building of relationships with the community based on trust and mutual advantage is essential to business success and sustainability. This is recognised by the commitment of BHOP to further developing the community consultation programme, which includes:

- continued support of the Community Consultation Group who will continue to meet on a regular basis;
- provision of the Rasp Mine News Updates to local neighbours surrounding the mine to outline information on activities;
- Rasp Mine information notice board to be located at the Café and Miner's Memorial;
- annual distribution of a Rasp Mine magazine providing a summary of environmental monitoring, initiatives and activities;
- targeted consultation involving presentations and briefings on specific issues as they arise;

- consultation with relevant stakeholders during the preparation of the final closure plan; and
- continued implementation of the complaints procedure to address individual issues as they arise.

NOISE AND VIBRATION

BHOP understands that intrusive noise, vibration and overpressure levels are a concern for community members and can affect their standard of living. In recognition of this concern BHOP have made a number of commitments to mitigate noise levels from the Project including:

- re-location of the processing plant to the north-eastern end of the site, away from residential dwellings to the south;
- re-location of mine ventilation fans to Little Kintore Pit and away from residential and commercial areas and installing noise suppression on the fan units;
- smaller stope designs to reduce blast vibrations, designing blasts and arranging firing times to minimise potential community impacts;
- construction of noise barriers with 4 m high bunding along the southern side of the haul road and the southern perimeter of the ROM pad mine truck haul route;
- silencers installed on haul trucks and noise suppression kits on the FEL(s) used on the ROM pad, container stockpile and rail loading areas;
- limiting crushing to dayshift (7:00am to 7:00pm) seven days a week;
- limiting shunting of concentrate wagons to between 7:00am and 6:00pm seven days a week;
- prohibiting production rock blasting between 7:15pm and 6:45am seven days a week;
- restricting construction activities to day shift;
- cladding of the primary crusher and installing noise abatement bunding to the north and south of the crusher;
- installing a building around the flotation facility providing shielding of the SAG and Ball mills;
- covered conveyors and transfer stations prior to the grinding circuit; and
- installation of two overlapping bunds at the northern side of the wagon stockpile area to shield Crystal Street residences.

In addition, BHOP will ensure that:

- operational noise is within limits of the NSW Industrial Noise Policy.
- rock blast vibration levels are within guidelines issued by the Australian and New Zealand Environmental and Conservation Council.
- rock blast overpressure limits are within guidelines issued by the Australian and New Zealand Environmental and Conservation Council.

The current noise, vibration and overpressure management plan will be updated to address potential impacts from new Project activities prior to the commencement of those activities. Without limiting the contents of this plan, the plan will include:

- trigger limits for noise levels with response actions plans;
- details of major emission sources and their mitigation measures;
- details of inspection and monitoring programmes;
- details and requirements for a noise awareness programme for employees and contractors;
- details of the community complaints procedure; and
- internal and external reporting requirements.

The construction environmental management plan will outline specific requirements for noise, vibration and overpressure mitigation and reduction during construction activities.

AIR QUALITY

BHOP recognises that of particular concern to the local community is the generation of dust and lead dust. BHOP is committed to implementing the following dust mitigation and suppression measures:

- use of water spray / chemical dust suppressant system at the tailings storage facilities;
- installation of vehicle wash facilities with a wash facility installed post concentrate loading to accommodate both the truck and concentrate container ;
- extensive sealing of haul roads and other primary roadways;

Roads to be Sealed

	Road	Length (m)
Existing	Front gate to truck wash	292
	'Diamond' intersection to core shed	360
	Front gate road to car park	132
Proposed	Truck wash to haul road connection from Kintore Pit	690
	Kintore Pit intersection (truck wash and haul roads) to ROM pad (haul road for ore mine trucks)	1186
	ROM pad to and through mill	354
	Mill to rail load out (concentrate trucks)	910
	Truck wash road to workshop	190
	Haul road to backfill plant	400

- application of chemical dust suppression as per the manufacturer's specification, or more often as required, on all "free areas" of the site as per the following figure;
- enclosure of all above ground conveyors and transfer points prior to the grinding circuit (SAG and ball mills);
- restricted height of ROM stockpile and installation of static wind breaks (orientated perpendicular to the dominant wind direction) along with top-mounted water sprays;
- water sprays on all permanent stockpiles;

- maintaining a concentrate moisture level of around 9 percent;
- service roads and tip points around the stockpile will be laid with compacted road base (high moisture and low silt content);
- installation of real-time air quality monitoring to assist in the active management of emissions;
- limitation of vehicle or work access in exposed areas;
- maintaining of surface crust to minimise potential wind erosion;
- identification and remediation of areas where fines or silt has built up (typically after heavy rain storms);
- remediation of disturbed areas including but not limited to, removal and burial of fine material, capping with inert waste rock, or use of dust suppressants;
- undertaking sampling to quantify road surface silt loadings on an ongoing basis; and
- installation of video recording equipment to assist in the active management of emissions for the TSF.

In addition to mitigation measures, best practice will be employed during the operations. This includes:

- adoption of a lead management plan to address specific issues dealing with personal hygiene of employees, blood lead action guidelines, sampling and environmental monitoring;
- continuation and expansion of the existing air quality management program to include high volume samplers, dust deposition jars and real time monitors;
- regular maintenance of pollution control equipment to ensure that it is functioning at optimal performance levels. A maintenance schedule will be documented and implemented for all pollution control equipment as part of an environmental management plan;
- maintain and operate all plant and equipment installed or used at the site in a proper and efficient manner;
- maintaining the premises in a condition which minimises or prevents the emission of dust from the premises; and
- ensuring visible dust emissions from any tailings storage facility are negligible.

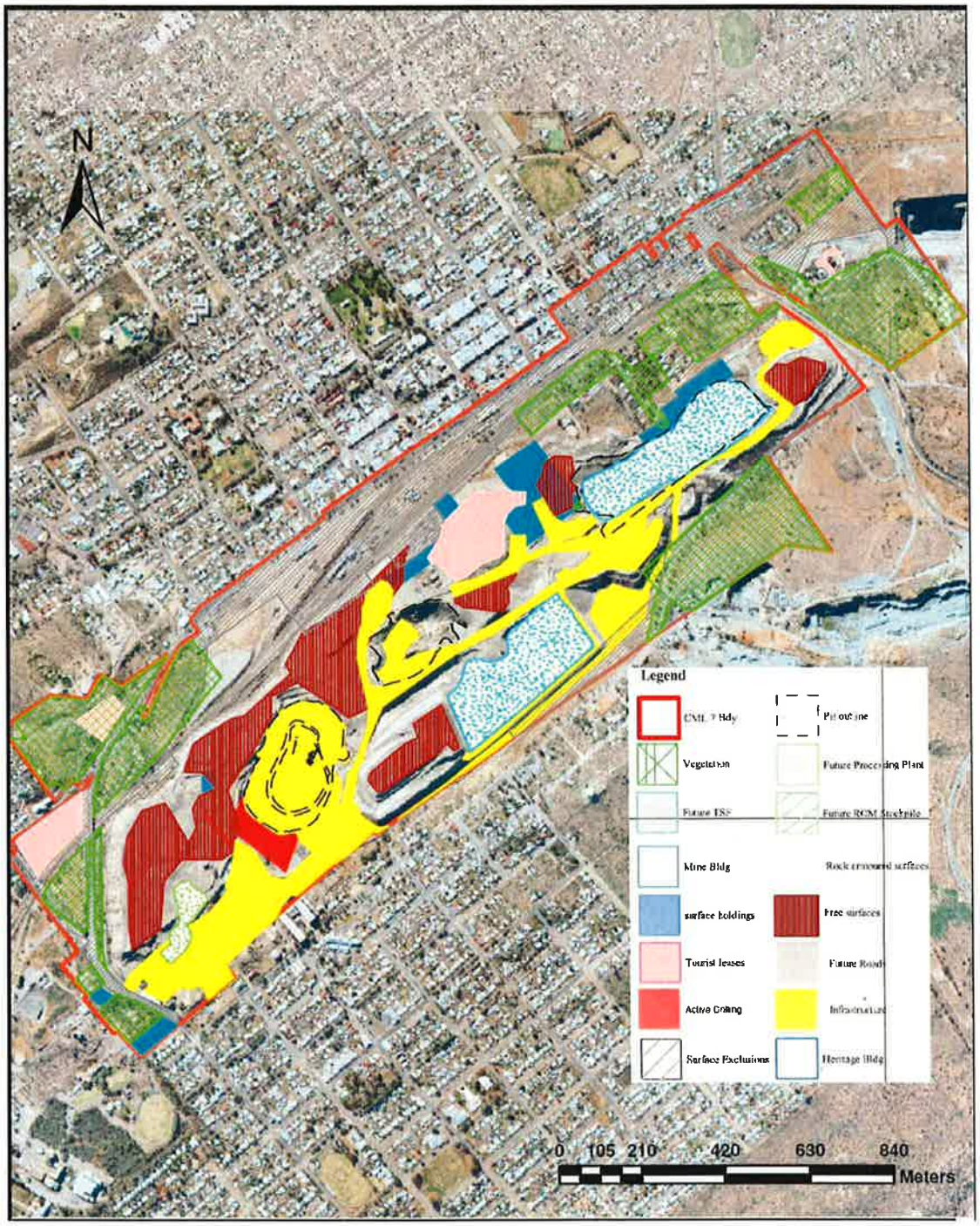
A CEMP will also be developed prior to construction. The plan will include management and monitoring measures relating to air quality that will be implemented during all construction works.

A Tailing Construction and Operation Manual will be completed and implemented prior to the commencement of any construction activities at the site.

In addition the following measures will be undertaken to minimise and monitor greenhouse gases:

- efficiency of all new mobile and fixed equipment will be considered during procurement for both diesel and electric powered equipment;

- within 12 months of commencement of underground mining, an energy audit will be conducted to compare predicted and actual energy consumption;
- equipment will be maintained to retain high levels of energy efficiency;
- the inventory of emissions developed for this assessment will be regularly updated and maintained; and
- emissions and abatement strategies will be reported annually in the AEMR.



Chemical Dust Suppressants to be applied to "Free Areas"

COMMUNITY HEALTH

Community feedback has emphasised their concern with the potential of the Project to impact on blood lead levels. BHOP is committed to implementing dust mitigation and suppression measures (Section 18.4) to manage emissions and prevent adverse impacts from its operations contributing to increased blood lead levels in the local community through a lead management plan. In addition the lead management plan will include:

- requirements for employee and contractor hygiene;
- requirements for washing lead soiled articles, for example laundering of work clothes;
- requirements for washing vehicles prior to leaving the site;
- requirements for monitoring of lead blood levels with actions to be taken when designated trigger levels are reached; and
- requirements for inspections and housekeeping for each operational area to minimise dust build-up and the potential for subsequent off-site movement.

In addition, BHOP will conduct bi-annual assessment of soil contamination on land in Eyre Street and land adjacent to TSF1 until TSF1 is decommissioned and rehabilitated.

If the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR (Annexure I(b)), then a new health risk assessment of the dust suppressant will be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site.

BHOP is also committed to maintaining a high level of lead awareness within the local community by contributing to lead awareness education programmes.

WATER RESOURCES

Conservation of water resources is increasing seen as a critical activity and BHOP is committed to the following water conservation measures:

- treatment of mine dewatering to enable usage in the processing plant;
- tailings water to be returned to the processing plant for reuse;
- water to be recycled from Horwood Dam to the processing plant;
- investigation of the use of the silver tank as water holding tank for water to be recycled to the processing plant, reducing the potential for evaporation from open type storages;
- investigate the use of grey water from domestic facilities for use in ground management; and
- installation of flow metres to monitor water usage.

If sufficient water is not available, the scale of their operations will be adjusted to match the licensed water entitlements.

Measures to manage water quality that will be included in BHOP's water management programme include:

- provision and location of spill kits and requirements for training;
- design and installation of chemical storage to include bunds with suitable sumps, and where appropriate roofed to prevent stormwater entry;
- bunding of the diesel refuelling station;
- oil / water separators to be installed at vehicle wash facilities and the diesel refuelling station;
- management of sediment and sludge from vehicle washing facilities;
- water quality monitoring including groundwater (represented by mine dewatering) and at locations to the east of TSF1, and surface water represented by Horwood Dam;
- monitor the quality and quantity of water captured by the toe drains on the Tailings Storage Facility (TSF); and
- monitor the movement of seepage sourced from the TSF and to monitor the quality of the local groundwater system.

In addition the recommendations from the Stormwater Management Plan as proposed by Golder Associates (Golder 2010, Annexure K) will be implemented and will address potential impacts from new Project activities prior to the commencement of those activities. This Plan includes:

- erosion and sediment control measures;
- design requirements for on-site retention evaporation basins;
- requirements for management of catchment areas, including drains, pipework, bunding and sumps; and
- quarterly inspections of the site storm water management structures to confirm that they are operational.

In addition, a Groundwater Management Plan will be prepared to provide details of the monitoring of seepage movement within and adjacent to the TSF.

Finally, all necessary licences under the *Water Act 1912* will be obtained prior to the commencement of activities on site.

HERITAGE

BHOP recognises the historical value of the site as the original BHP operations and representing mining from the 1880s and the importance this has to the local community. BHOP is committed to protecting the historical value of the site through the implementation of a Conservation Management Plan that will provide the strategic framework for all heritage items located on the Lease based on the principles of the Burra Charter. The Conservation Management Plan will include:

- photographic record of listed heritage buildings;

- programmes for each building for adaptive reuse outlining measures to maintain its structural stability and identify requirements for retention, renovations, permitted re-use and ongoing maintenance;
- preservation requirements for buildings not to be reused;
- inspection and monitoring programme;
- inventory of all mobile items remaining on site;
- agreement with a mining history organisation to preserve and care for relocated items; and
- procedures for the preservation of opportunistic finds, including Aboriginal and European objects.

The Conservation Management Plan will outline specific requirements for the management of historical heritage.

In addition, the Conservation Management Plan will include appropriate management measures to be implemented in the event that an Aboriginal object is identified on-site.

VISUAL AMENITY

Visual impacts will be minimised by implementation of the following management measures:

- material stockpiles, waste, plant, equipment and vehicle parking will be restricted to designated areas;
- where possible, avoid the use of highly reflective materials and colours on the site, unless necessary for safety reasons;
- lighting being kept to a minimum necessary to safely carry out operations;
- lighting being directed away from residences through the use of directional lighting equipment and shielding; and
- implementation of a rehabilitation and mine closure strategy post operations, aimed at retaining the mining character of the site.

TRAFFIC AND TRANSPORT

BHOP is committed to providing a safe road network for its employees, contractors and the surrounding community. The major measures to manage road safety include:

- sealing of all main traffic routes including the roads indicated in the table located at 3.4;
- placing compacted moisture conditioned road base on other internal roads and chemical dust suppressant as required to minimise off site dust levels;
- requiring heavy vehicles associated with deliveries to the mine to use approved B-Double routes;
- restrict trucking movements for off site ore transport to between 7 am and 6 pm.

- providing sufficient parking spaces on-site for employee and contractor vehicles;
- implementing safety procedures to be adhered to during temporary usage of the South Road access; and
- assessing the capability of the existing road pavement along Eyre Street to withstand the intended road and traffic movement associated with the Project. This assessment would be undertaken prior to the commencement of construction. If it is found that the road pavement is inadequate, then BHOP will consult with BHCC to agree on any feasible contributions for road pavement improvement and/or maintenance works.

The construction environmental management plan will outline specific requirements for the management of traffic and transport, and a traffic management plan will be developed for operations.

Additional works to be implemented at the Eyre Street site entrance/exit would be undertaken at the costs of BHOP.

WASTE MANAGEMENT

Prior to commencement of operations, the procedures for managing wastes will be detailed in the waste management programme. The waste management programme will describe the following:

- recycling of wastes, where practicable;
- storage of general waste, which cannot be recycled, in bins on-site prior to collection and off-site disposal by a licensed waste disposal contractor;
- burying of packaging from explosive products in a separated, designated site in the bottom of BHP Pit or disposed of as part of the back fill for stopes;
- storage of other regulated or hazardous waste in drums or designated bins on-site in a bunded area until collected by a licensed contractor for recycling or disposal off-site at a regulated facility;
- depositing mineralised waste rock in the BHP Pit or used as rock fill in underground stoping voids;
- using non-mineralised waste rock as road base, fill material for earth bunding, rehabilitative covering for disturbed areas or rock fill in underground stoping voids; and
- using tailings as part of the back fill mix for stopes underground.

The construction environmental management plan will outline specific requirements for the management of waste.

REHABILITATION AND CLOSURE

BHOP intend to return the Project Area to the community at the cessation of mining activities in a suitable condition to achieve agreed closure objectives. The rehabilitation and mine closure strategy will include:

- preparing and implementing a Rehabilitation Environmental Management Plan (or any such plan as required by the project approval), which addresses all aspects of rehabilitation and mine closure;

- development of a conceptual mine closure plan;
- objectives for landscape management and rehabilitation;
- methodology for decommissioning, landscape management and rehabilitation of the Project Area;
- post-mining care and maintenance, and ongoing monitoring and management requirements; and
- mine planning to consider and implement rehabilitation and closure strategy on an ongoing basis for the life of mine through progressive rehabilitation.

In addition the strategy will address the rehabilitation and mine closure requirements for the following key areas;

- final land form – confirm that the resulting landform will be similar to the current landform;
- drainage and erosion control – re-assessment and implementation of stormwater management plan for post-mining activities;
- safety – audit of Project Area to identify potential post-mining hazards and implement the appropriate controls;
- tailings – contain tailings to provide for long-term stability and prevention of dust generation; and
- heritage items – preserve the heritage value of the Project Area for future use by the community