

Project Approval

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

As delegate for the Minister for Planning and Infrastructure, I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

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.

Richard Pearson
Deputy Director-General
Development Assessment and Systems Performance

Sydney

2012

SCHEDULE 1

Application Number:	10_0191
Proponent:	Hera Resources Pty Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	Part Lot 664 DP 761702
Project:	Hera Project

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Blue type represents July 2013 Modification

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DEFINITIONS

Annual Review	The review required by condition 4 of Schedule 5
Approval	This project approval
BCA	Building Code of Australia
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in Schedules 2 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval
Council	Cobar Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department, or delegate
DRE	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services
EA	Environmental Assessment titled ' <i>Hera Project, via Nymagee: Environmental Assessment</i> ' dated November 2011 and associated response to submissions titled ' <i>Hera Project via Nymagee: Response to Submissions</i> ', dated February 2012
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Executive Director Mineral Resources	Executive Director, Mineral Resources within DRE, or equivalent position
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
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
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this approval where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of 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
Mining operations	Includes the removal of waste rock and the extraction, processing, handling storage and transportation of ore material
Minister	Minister for Planning and Infrastructure, or delegate
Minor	Small in quantity, size and degree given the relative context
Mitigation	Activities associated with reducing the impacts of the project prior to or during those impacts occurring
Modification 1	Modification Application 10_0191 MOD1 and supporting document titled – 'Hera Mine Section 75W Modification: Power lines from ventilation rise to site camp', prepared by YTC Resources, and dated May 2013
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water, within the Department of Primary Industry
OEH	Office of Environment and Heritage, within the Department of Premier and Cabinet
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The project described in the EA
Proponent	Hera Resources Pty Limited, or any other person or persons who rely on this approval to carry out the development that is subject to this approval
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.
RMS	Roads and Maritime Services
Site	The land listed in Appendix 1
Statement of Commitments	The Proponent's commitments in Appendix 5

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this approval, 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) Statement of Commitments;
- (c) conditions of this approval; and
- (d) [Modification 1](#).

Notes:

- The general layout of the project is shown in Appendix 1; and
- The Statement of Commitments is reproduced in Appendix 5.

3. If there is any inconsistency between the above documents, the most recent document 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 strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with 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 the site until 31 December 2020.

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

Ore Extraction and Processing

6. The Proponent shall not:
 - (a) process more than 355,000 tonnes of ore on the site in a calendar year;
 - (b) process more than 1.9 million tonnes on the site over the life of the project; or
 - (c) transport more than 50,000 tonnes of concentrate from the site in a calendar year,

Hours of Operation

7. The Proponent shall comply with the operating hours in Table 1.

Table 1: Operating hours

Activity	Operating Hours
Vegetation clearing and topsoil stripping	7am to 6pm, 7 days per week
Construction	24 hours, 7 days per week
Mining, maintenance and processing operations	
Rehabilitation	Day / Evening
Transportation of lead and zinc concentrate and gold doré from the site	7am to 10pm, 7 days per week

Note: Conditions 5 and 6 of Schedule 3 include restrictions on blasting times.

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:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works;
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project; and
- Under the Dams Safety Act 1978, the Proponent will require a further approval for the project's tailings storage facility.

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.

PROTECTION OF PUBLIC INFRASTRUCTURE

10. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

OPERATION OF PLANT AND EQUIPMENT

11. The Proponent shall ensure that all the plant and equipment used at the site, or to transport materials 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 OR PROGRAM

12. With the approval of the Director-General, the Proponent may:
- (a) submit any strategy, plan or program required by this approval on a progressive basis; and
 - (b) combine any strategy, plan or program required by this approval with any similar strategy, plan or program required for the project.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

13. Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall implement the existing strategies, plans or programs for the site that have been approved under the approved exploration activities described in *Review of Environmental Effects* entitled "Exploration Decline at the Hera Deposit within Exploration Licence 6162".

PLANNING AGREEMENT

14. Within 6 months of the date of this approval, unless otherwise agreed by the Director-General, the Proponent shall enter into a planning agreement with Council in accordance with Division 6 of Part 4 of the EP&A Act, which provides for contributions to Council for:
- (a) a community fund;
 - (b) public infrastructure and services, as identified in Council's Community Enhancement Program; and
 - (c) road maintenance.

The terms of the planning agreement shall be consistent with general terms of agreement between Council and Hera Resources Pty Limited outlined in Appendix 2.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

NOISE

Noise Criteria

1. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 2: Noise Criteria dB(A)

Receivers	Day	Evening	Night	
	(<i>L_{Aeq}(15-minute)</i>)	(<i>L_{Aeq}(15-minute)</i>)	(<i>L_{Aeq}(15-minute)</i>)	(<i>L_{A1}(max)</i>)
All residential receivers	35	35	35	45

Note: Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Operating Conditions

2. The Proponent shall:
 - (a) implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational, low frequency and traffic noise of the project;
 - (b) maintain the effectiveness of noise suppression equipment on plant at all times and ensure that defective plant is not used operationally until fully repaired; and
 - (c) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply, to the satisfaction of the Director-General.

Noise Management Plan

3. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. The plan must:
 - (a) be prepared in consultation with the EPA, and submitted to the Director-General for approval within six months of this approval;
 - (b) describe the measures that would be implemented to ensure compliance with conditions 1 and 2 of this schedule; and
 - (c) include a monitoring program that:
 - (i) adequately supports the noise management system on site;
 - (ii) includes a protocol for determining exceedences of the criteria identified in Table 2; and
 - (iii) evaluates and reports on the effectiveness of the noise management system on site.

BLASTING

Blasting Criteria

4. The Proponent shall ensure that blasting on the site does not cause exceedences of the criteria in Table 3.

Table 3: Blasting Criteria

Location	Time Period	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedence
Residence on privately-owned land	Any time	120	10	0%
	Day	115	5	5% of total blasts over a period of 12 months
	Evening	-	2	5% of total blasts over a period of 12 months
	Night and all day on Sundays and public holidays	-	1	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner, and has advised the Department in writing of the terms of this agreement.

Blasting Hours

5. The Proponent shall only carry out above ground blasting on site between 9:00am and 5:00pm Monday to Saturday, inclusive. No above ground blasting is allowed on Sundays, public holidays or at any other time without the written approval of the Director-General.
6. Underground blasting may be undertaken at any time, subject to compliance with the conditions of this approval.

Blasting Frequency

7. In relation to above ground blasting, the Proponent may carry out a maximum of:
 - (a) three blasts per day, unless an additional blast is required following a blast misfire; and
 - (b) five blasts per week, averaged over a calendar year, for all operations on the site.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or blasts required to ensure the safety of the site or its workers.

Note: For the purpose of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the site.

Operating Conditions

8. During operation of the project, the Proponent shall:
 - (a) implement best management practice to:
 - (i) protect the safety of people and livestock in the surrounding area;
 - (ii) protect public or private infrastructure/property in the surrounding area from any damage; and
 - (iii) minimise the dust and fume emissions from any blasting; and
 - (b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Director-General.

Blast Management Plan

9. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - (a) be prepared in consultation with the EPA, and submitted to the Director-General for approval within six months of this approval;
 - (b) describe the blast mitigation measures that would be implemented to ensure compliance with conditions 4-8 of this schedule; and
 - (c) include a blast monitoring program to evaluate the performance of the project.

AIR QUALITY AND GREENHOUSE GAS

Odour

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

Greenhouse Gas Emissions

11. 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

12. 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 exceed the criteria listed in Tables 4, 5 or 6 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 4: Long term impact assessment criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 5: Short term impact assessment criterion for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 6: Long term impact assessment criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 4-6:

- ^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; and
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.

- The Proponent shall ensure that all point-source discharge locations on the site are designed and operated to comply with the maximum discharge concentrations applicable under the *Protection of the Environment (Clean Air) Regulation 2010* and the requirements of any Environment Protection Licence issued for the project under the POEO Act.

Operating Conditions

- The Proponent shall:
 - implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project;
 - minimise any visible air pollution generated by the project;
 - minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d in Tables 4-6);
 - take all practical measures to minimise dust emissions from the tailings storage facility; to the satisfaction of the Director-General.

Air Quality and Greenhouse Gas Management Plan

- The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - be prepared in consultation with the EPA, and be submitted to the Director-General for approval within six months of this approval;
 - describe the measures that would be implemented to ensure compliance conditions 10-14 of this schedule;
 - describe the proposed air quality management system;
 - include an air quality monitoring program that:
 - uses a combination of high volumes samplers and dust deposition gauges to evaluate the performance of the project; and
 - includes a protocol for determining exceedences of the relevant conditions of this approval; and
 - describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site.

METEOROLOGICAL MONITORING

- For the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

SOIL AND WATER

Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain all necessary water licences for the project.

Water Supply

- 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 available water supply, to the satisfaction of the Director-General.

Water Discharges

18. The Proponent shall ensure that all surface water discharges from the site comply with:
 - (a) section 120 of the POEO Act; or
 - (b) the discharge limits (both volume and quality) set for the project in any applicable EPL.
19. The concentration of Weak Acid Dissociable (WAD) cyanide in tailings discharged from the discharge point to the tailings storage facility shall not exceed 10 mg/L.
20. The concentration of Weak Acid Dissociable (WAD) cyanide at the discharge point to the process water dam shall not exceed 20 mg/L (90th percentile) or 30 mg/L (maximum).

Compensatory Water Supply

21. The Proponent shall provide a compensatory water supply to any owner on privately-owned land whose water supply is adversely impacted (other than an impact that is negligible) as a result of the project, in consultation with NOW, and to the satisfaction of the Director-General.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent in volume and quality to the loss attributed to the project. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified, unless otherwise agreed with the landowner.

If the Proponent and the affected landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Director-General.

Note: the Water Management Plan prepared in accordance with condition 25 shall describe the procedures for:

- assessing the impacts of the project on water entitlements on privately-owned land; and
- the provision of compensatory water supply.

Design and Permeability of Storages

22. The Proponent shall ensure that the floor and walls of:
 - (a) the leachate management pond, seepage collection pond (associated with the tailings storage facility), process water dam and raw water dam are lined to achieve a permeability of no less than 1×10^{-9} m/s to a depth of at least 900 millimetres of clay (or equivalent); and
 - (b) the tailings storage facility (except for the seepage collection pond) is lined to achieve a permeability of no less than 1×10^{-8} m/s to a depth of at least 600 millimetres of clay (or equivalent).

Note: An alternative permeability standard may be acceptable following completion of an appropriate risk assessment undertaken in accordance with the Environmental Guidelines – Management of Tailings Storage Facilities (VIC DPI, 2004), to the satisfaction of the EPA and the Director-General.

23. The clean water diversion around the tailings storage facility shall be designed, constructed and maintained to prevent the probable maximum flood from the catchment upstream of the facility from entering the facility.
24. The process water and raw water dams shall be maintained with a minimum freeboard sufficient to accommodate a 1 in 100-year ARI, 72-hour rainfall event without overtopping at all times.

Water Management Plan

25. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with EPA and NOW by suitably qualified and experienced persons whose appointment has been approved by the Director-General, and submitted to the Director-General for approval within six months of this approval, or prior to commencement of mining operations under this approval, whichever is sooner;

In addition to the standard requirements for management plans (see Condition 3 of Schedule 5), this plan must include:

- (a) a Site Water Balance that includes details of:
 - sources of water supply;
 - water use on site, including any potable water use;
 - water management on site;
 - off-site water discharges, including volume, timing and release point infrastructure requirements; and
 - reporting procedures including comparisons of the site water balance for each calendar year; and

- (b) a Surface Water Management Plan, which includes:
- baseline data on surface water flows and quality in waterbodies that could be affected by the project;
 - a detailed description of the surface water management system on site, including the:
 - clean water diversion systems;
 - erosion and sediment controls; and
 - water storages, including the tailings storage facility, raw water or process water dams;
 - design objectives and performance criteria, including trigger levels for investigating any potentially adverse impacts, for the following:
 - the water management system;
 - water storages including the tailings storage facility, raw water or process water dams; and
 - surface water quality in waterbodies that could be affected by the project;
 - performance criteria for surface water quality attributes relevant to water quality impacts on biological diversity and aquatic ecological integrity, including cyanide, salinity, heavy metals, sediment load, pH, hardness and biological oxygen demand;
 - a program to monitor:
 - the effectiveness of the water management system;
 - surface water flows, quality, and impacts on water users;
 - potential acid rock drainage;
 - potential leakage or spillage from tailings, mineral concentrate or effluent pipelines;
 - post-closure water quality;
 - impacts on wildlife from exposure to cyanide or other toxic chemicals; and
 - a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project, including but not limited to management measures to reduce wildlife exposure to cyanide or other toxic chemicals;
 - reporting procedures for the results of the monitoring program; and
- (c) a Groundwater Management Plan, which includes:
- baseline data of all groundwater levels, yield and quality in the region, and any privately-owned groundwater bores that could be affected by the project;
 - detailed documentation of the operation of the seepage collection and storage system associated with the tailings storage facility and associated maintenance requirements;
 - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts, including but not limited to leakage from the tailings storage facility;
 - a program to monitor:
 - impacts on the groundwater supply of potentially affected landowners;
 - impacts on the volume of groundwater inflow into the underground workings;
 - regional groundwater levels and quality in all potentially affected aquifers;
 - potential acid rock drainage;
 - the effectiveness of the seepage collection and storage system and associated infrastructure in collecting and containing all seepage from the tailings storage facility and all other water storages that receive chemical or salt-laden water;
 - the quality of groundwater to be re-used on the site;
 - any post-rehabilitation seepage from the tailings storage facility; and
 - a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse groundwater impacts of the project, including but not limited to:
 - procedures to minimise the potential for soil salinity, sodicity and other contaminant issues associated with the reuse of groundwater on site; and
 - measures to manage and mitigate any leakage from the tailings storage facility, including but not limited to that detected beyond the seepage collection and storage system.

Note: The effectiveness of the Water Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 5 of Schedule 5).

BIODIVERSITY

Biodiversity Offset Strategy

26. Within 6 months of this approval, the Proponent shall prepare a Biodiversity Offset Strategy for the project to the satisfaction of the Director General. The Strategy must:
- (a) be prepared in consultation with OEH;
 - (b) identify the portion of the Chelsea site (WLL 3881) that would be conserved in perpetuity to offset the impacts of the project using the Biobanking Assessment Methodology; and
 - (c) describe the specific management measures that would be implemented on the Chelsea site to conserve and improve the biodiversity values of the site over time.
27. Following approval, the Proponent shall implement the Biodiversity Offset Strategy to the satisfaction of the Director General.

Long Term Security

28. Within 12 months of the approval of the Biodiversity Offset Strategy, the Proponent shall make suitable arrangements to conserve the offset area identified in the Biodiversity Offset Strategy in perpetuity to the satisfaction of the Director General.

Biodiversity Management Plan

29. Within 6 months of approval and prior to the commencement of vegetation clearing on the site under this approval, the Proponent shall submit a Biodiversity Management Plan for the project site to the Director-General for approval. This plan must:
- (a) be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Director-General;
 - (b) be prepared in consultation with OEH;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
 - (d) describe the short, medium, and long term measures that would be implemented to:
 - (i) manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable);
 - (ii) minimise the impacts on Cobar Greenhood Orchid (*Cryptostylis cobarensis*), Lobed Blue-grass (*Bothriochloa biloba*) and hollow-bearing trees; and
 - (iii) implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria;
 - (e) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
 - (f) include a detailed description of the procedures to be implemented for:
 - (i) enhancing the quality of existing vegetation and fauna habitat;
 - (ii) restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);
 - (iii) maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;
 - (iv) collecting and propagating seed;
 - (v) minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;
 - (vi) controlling weeds and feral pests;
 - (vii) controlling erosion;
 - (viii) managing grazing and agriculture on site;
 - (ix) controlling access; and
 - (x) bushfire management;
 - (g) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;
 - (h) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
 - (i) include details of who would be responsible for monitoring, reviewing and implementing the plan.
30. Within 6 months of the approval of the Biodiversity Offset Strategy, the Proponent shall submit an updated Biodiversity Management Plan to the Director General for approval.

Notes:

- The specific references to the Biodiversity Offset Strategy in condition 29 must be fully addressed in the updated management plan under condition 30.
- In the event that a Biobanking Agreement is entered into with respect to the biodiversity offsets for the project, a management plan under such an Agreement may be used to satisfy all or part of conditions 29 and 30 with the agreement of the Director-General.

Conservation Bond

31. Within three months of the approval of the Biodiversity Management Plan, the Proponent shall lodge a conservation bond with the Department to ensure that the biodiversity offset is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond shall cover the full cost of implementing the Biodiversity Offset Strategy and be verified by a suitably qualified rehabilitation specialist or quantity surveyor.

If the biodiversity offset is implemented to the satisfaction of the Director-General, the Director-General will release the conservation bond. If the offset strategy is not implemented to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the biodiversity offset.

HERITAGE

32. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. The Plan must:
- (a) be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);
 - (b) be submitted to the Director-General for approval within six months of this approval; and
 - (c) describe the measures that would be implemented for:
 - monitoring all new surface disturbance on site for unidentified Aboriginal objects;
 - managing the discovery of any human remains or previously unidentified Aboriginal objects on site; and
 - ensuring ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site.

TRANSPORT

Dangerous Goods

33. Transportation of all dangerous goods to or from the site shall be undertaken in strict accordance with *Australian Code for the Transport of Dangerous Goods by Road and Rail*.

Road Upgrades

34. Within 6 months of the date of this approval, the Proponent shall:
- (a) commission a suitably qualified independent expert, whose appointment has been approved by the Director-General, to undertake a design and pavement condition review for the intersection of Burthong Road and Priory Tank Road, which:
 - (i) identifies any deficiencies in the design or pavement condition of the intersection;
 - (ii) recommends appropriate design upgrades and pavement repairs taking into consideration the type, volume and direction of traffic generated by the mine; and
 - (iii) ensures the recommended design is in accordance with the applicable AUSTROADS standards.
 - (b) undertake intersection design and pavement upgrades in accordance with the recommendations of the review in (a), in consultation with Council, and to the satisfaction of Council.
35. Within 6 months of the date of this approval, the Proponent shall:
- (a) commission a suitably qualified independent expert, whose appointment has been approved by the Director-General, to undertake a review of the existing traffic control devices on Burthong Road and Priory Tank Road, which:
 - (i) reviews all existing traffic devices, including traffic signs, traffic signals, pavement markings, guide posts, delineators and safety barriers, and identifies any deficiencies; and
 - (ii) recommends appropriate upgrades in accordance with the applicable AUSTROADS standards;
 - (b) install traffic control devices in accordance with the recommendations of the review in (a), to the satisfaction of Council.

Access Road and Intersection Construction

36. The Proponent shall construct the site access road for heavy vehicles, and associated intersection of this access road and Burthong Road, prior to the commencement of construction of the process plant. The intersection shall be designed and constructed to the satisfaction of Council and in accordance with the applicable AUSTROADS standards.

Monitoring of Concentrate Transport

37. The Proponent shall:
- (a) keep accurate records of the:
 - (i) amount of lead and zinc concentrate transported from the site (on a monthly basis); and
 - (ii) the date and time of loaded truck movements from the site; and
 - (b) provide the Director-General with a summary of these truck movements in the Annual Review.

Traffic Management Plan

38. The Proponent shall prepare and implement a Traffic Management Plan to the satisfaction of the Director-General. The plan shall:
- (a) focus on traffic management along Burthong Road and Priory Tank Road, particularly in the vicinity of the village of Nymagee;
 - (b) describe the measures to minimise conflicts between road users and ensure that trucks from the mine do not travel through surrounding local roads; and
 - (c) be developed in consultation with Council and submitted for the approval of the Director-General prior to carrying out any development on the site under this approval.

VISUAL

Operating Conditions

39. The Proponent shall:
- (a) implement all reasonable and feasible measures to minimise the visual impacts, and particularly the off-site lighting impacts, of the project;
 - (b) ensure that all external lighting associated with project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

HAZARDOUS MATERIALS

Final Hazard Analysis

40. The Proponent shall prepare a Final Hazards Analysis (FHA) for the project to the satisfaction of the Director-General, in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis*.

Note: If the project design is the same as that assessed in the Preliminary Hazard Analysis (PHA), then the Director-General may accept the PHA as the FHA.

Hazardous Materials Management Plan

41. The Proponent shall prepare and implement a Hazardous Materials Management Plan for the project to the satisfaction of the Director-General. The plan must:
- (a) be prepared in consultation with the relevant government agencies including Council, RMS, EPA, NOW, WorkCover NSW and DRE;
 - (b) be consistent with the *International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold*;
 - (c) be submitted to the Director-General for approval prior to commencing mining operations under this approval;
 - (d) describe the measures that would be implemented to:
 - (i) ensure sodium cyanide and other toxic chemicals are stored and handled on the site in accordance with *AS/NZ 4452 – The Storage and Handling of Toxic Substances*; and
 - (ii) ensure the transportation of hazardous materials to or from the site is undertaken in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 11 – Route Selection* and the *Australian Code for the Transport of Dangerous Goods by Road and Rail – current version*; and
 - (e) detail the emergency procedures for the Project consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning*.

WASTE

42. The Proponent shall:
- (a) minimise the waste generated by the project;
 - (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and
 - (c) manage on-site sewage treatment disposal in accordance with the requirements of Council, to the satisfaction of the Director-General

Waste Rock Management Plan

43. The Proponent shall prepare and implement a Waste Rock Management Plan to the satisfaction of the Director-General. The plan must:
- (a) be developed in consultation with the EPA and NOW;
 - (b) submitted for the approval of the Director-General within six months of this approval;
 - (c) include a detailed description of the procedures to be implemented to monitor and manage potential acid forming material;
 - (d) reflect the groundwater and surface water monitoring programs to monitor potentially acid-forming waste rock and any leachate generated, including appropriately designed detection and response systems for acid generation (covering monitoring methods, trigger levels and proposed management actions);
 - (e) ensure effective isolation of potential acid forming material in rock dumps;
 - (f) include procedures for appropriate testing of potentially acid forming waste rock prior to it being brought to the surface;
 - (g) include procedures for prioritising the relocation of potential acid forming material to a suitable underground locations prior to oxidation;
 - (h) include procedures to ensure that material relocated underground does not, to the extent reasonable and feasible, further oxidise or cause impact to groundwater;

- (i) notwithstanding (e) above, trigger levels for any material that has oxidised to the extent that it cannot be placed underground without impacting groundwater quality and procedures for adequate capping and sealing of such material at the surface;
- (j) detail proposed neutralising options to be implemented for oxidising material stored or encapsulated aboveground; and
- (k) where there is likely to be an extended time between placement of potential acid forming material underground, details of proposed methods to prevent oxidation of the material underground or to otherwise manage acid drainage to prevent impacts on groundwater.

REHABILITATION

Rehabilitation Objectives

44. The Proponent shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (as reproduced in Appendix 4), and comply with the objectives in Table 7:

Table 7: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	Safe, stable and non-polluting
Surface infrastructure	To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise
Other land	Establish the 'Chelsea' site (refer to Appendix 3) as a biodiversity offset.
Community	Minimise the adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

45. The Proponent shall carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable after disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.

Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the project.

Rehabilitation Management Plan

46. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director Mineral Resources. This plan must:
- (a) be prepared in consultation with the Department, OEH, EPA, NOW and Council;
 - (b) be submitted to the Executive Director Mineral Resources for approval prior to carrying out development on the site under this approval;
 - (c) be prepared in accordance with any relevant DRE guideline;
 - (d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 44;
 - (e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;
 - (f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
 - (g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use;
 - (h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
 - (i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
 - (j) build, to the maximum extent practicable, on the other management plans required under this approval.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. Within 3 months of the date of project approval, the Proponent shall notify in writing the owners of any privately-owned land within two kilometres of the approved blasting on site that they are entitled to request an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated.
2. Within two weeks of obtaining monitoring results showing:
 - (1) an exceedence of any relevant noise criteria in Schedule 3, the Proponent shall notify affected landowners and/ or tenants in writing of the exceedence, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria; and
 - (2) an exceedence of any relevant air quality criteria in Schedule 3, the Proponent shall send the affected landowners and/ or tenants a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time).

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

If the Director-General is satisfied that an independent review is warranted, then within two months of the Director-General's decision the Proponent shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
 - (i) consult with the landowner to determine his/ her concerns;
 - (ii) conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and
 - (iii) if the project is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria.
 - (b) give the Director-General and landowner a copy of the independent review.
3. If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.
 4. If the independent review determines that the project is not complying with the relevant criteria in Schedule 3, then the Proponent shall:
 - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; or
 - (b) secure a written agreement with the landowner to allow exceedences of the relevant criteria, to the satisfaction of the Director-General.
-

SCHEDULE 5 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 for approval to the Director-General within six months of this approval;
 - (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:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - (ii) receive, handle, respond to, and record complaints;
 - (iii) resolve any disputes that may arise during the course of the project;
 - (iv) respond to any non-compliance;
 - (v) respond to emergencies; and
 - (f) include:
 - (i) copies of any strategies, plans and programs approved under the conditions of this approval; and
 - (ii) a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

Adaptive Management

2. The Proponent shall assess and manage project-related risks to ensure that there are no exceedences of the criteria and/or performance measures in schedule 3. Any exceedence of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedence of these criteria and/or performance measures has occurred, the Proponent shall, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedence ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Director-General, to the satisfaction of the Director-General.

Management Plan Requirements

3. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures/criteria;
 - (iii) 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:
 - (i) impacts and environmental performance of the project;
 - (ii) effectiveness of any management measures (see c above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (f) a protocol for managing and reporting any:
 - (i) incidents;
 - (ii) complaints;
 - (iii) non-compliances with statutory requirements; and
 - (iv) exceedences of the impact assessment criteria and/or performance criteria; and
 - (g) a protocol for periodic review of the plan.

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

Annual Review

4. By the end of December each year (or other such timing as agreed by the Director-General), 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:
 - (i) the relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this approval;
 - (iii) the monitoring results of previous years; and
 - (iv) the relevant predictions in the EA;
 - (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 measures will be implemented over the next year to improve the environmental performance of the project.

Revision of Strategies, Plans and Programs

5. Within three months of:
 - (a) the submission of an annual review under condition 4 above;
 - (b) the submission of an incident report under condition 7 below;
 - (c) the submission of an audit under condition 9 below; or
 - (d) any modification to 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.

Community Consultative Committee

6. The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and to the satisfaction of the Director-General. This CCC must be operating within six months of this approval.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; and*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.*

REPORTING

Incident Reporting

7. 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

8. 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 of the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within one year of commencement of development on the site under this approval, 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. The audit must:
 - (a) be conducted by a 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 assess whether it is complying with the 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 strategies, plans or programs required under the abovementioned approvals; and
- (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/ or any assessment, plan or program required under the abovementioned approvals.

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

- 10. Within six weeks of the completion 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

- 11. Prior to the commencement of construction on the site, the Proponent shall:
 - (a) make copies of the following publicly available on its website:
 - (i) the documents referred to in condition 2 of Schedule 2;
 - (ii) all relevant statutory approvals for the project;
 - (iii) all approved strategies, plans and programs required under the conditions of this approval;
 - (iv) a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any approved plans or programs required under the conditions of this or any other approval;
 - (v) a complaints register, which is to be updated on a monthly basis;
 - (vi) minutes of CCC meetings;
 - (vii) the annual reviews required under this approval;
 - (viii) any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;
 - (ix) any other matter required by the Director-General; and
 - (b) keep this information up-to-date, to the satisfaction of the Director-General.
-

APPENDIX 1 PROJECT LAYOUT PLAN

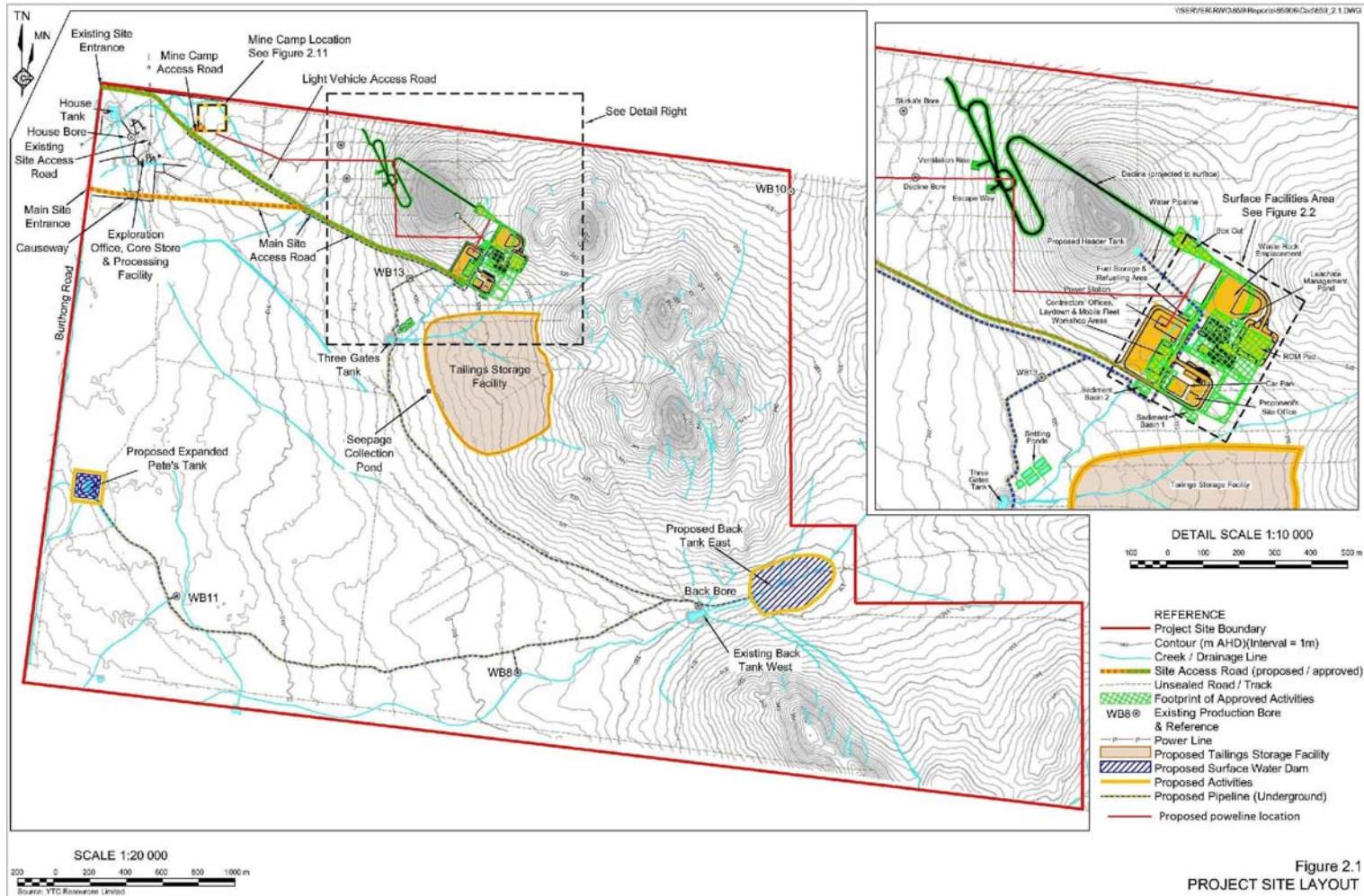


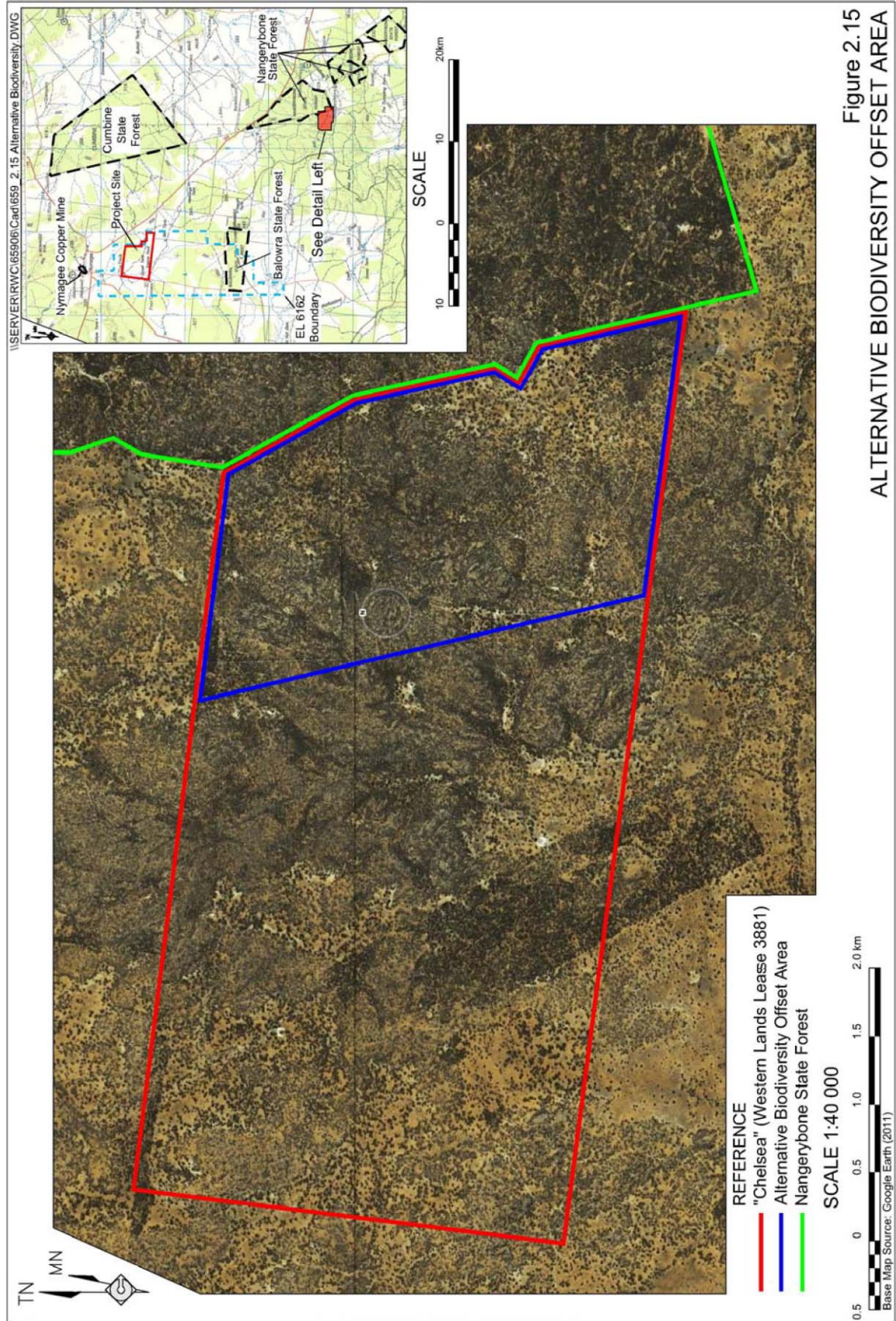
Figure 1: Mine Site Layout

**APPENDIX 2
PLANNING AGREEMENT TERMS**

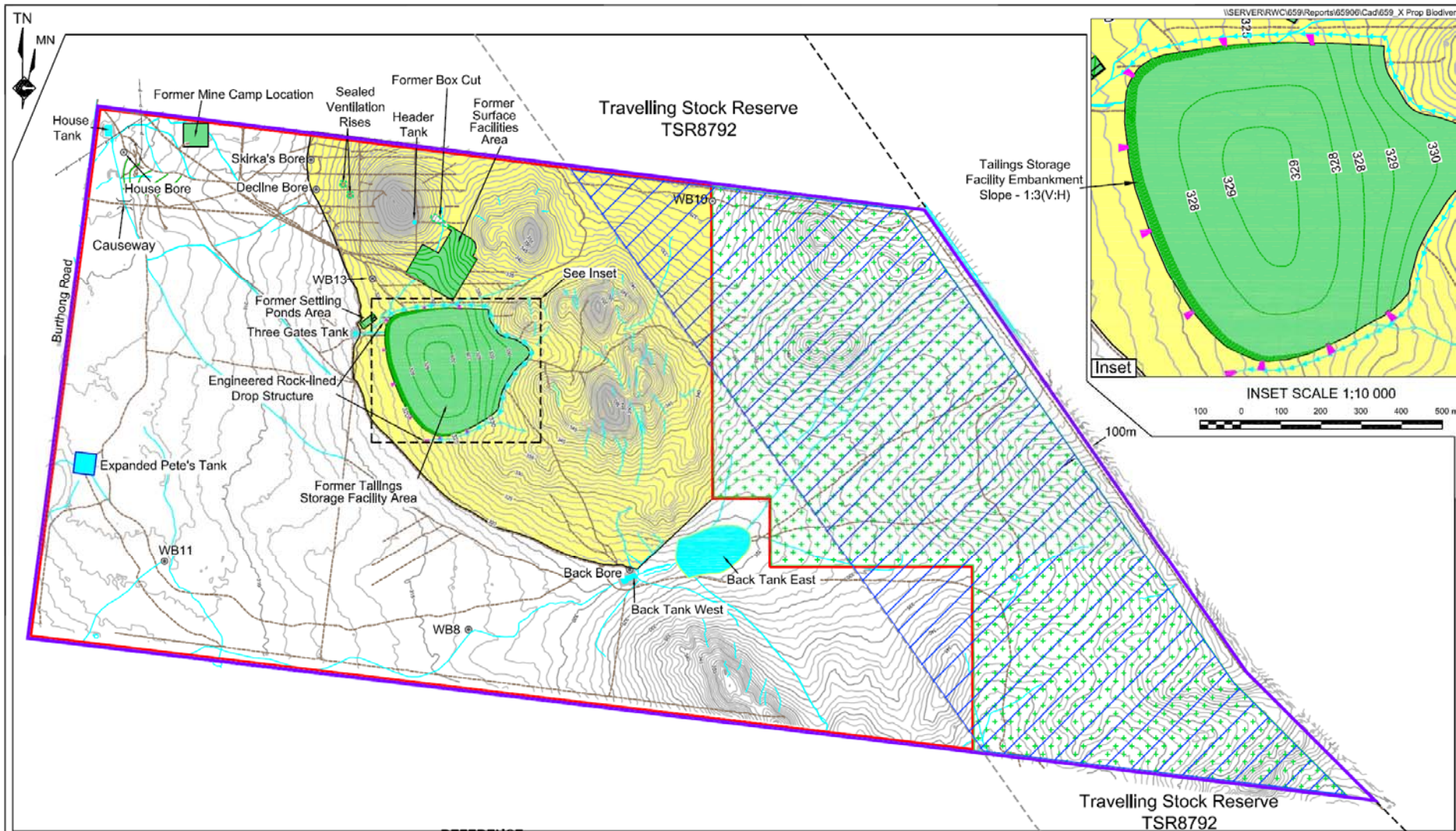
Development Contributions – Construction Period	
Period (years)	1.5
Section 94 Road Contributions (per annum)	\$0.00
Community Fund (per annum)	\$50,000.00
TOTAL ANNUAL PAYMENTS	\$50,000.00
TOTAL CONTRIBUTIONS – CONSTRUCTION PERIOD	\$75,000.00

Development Contributions – Production Period	
Period (years)	5.5
Section 94 Road Contributions (per annum)	\$63,700.00
Community Fund (per annum)	\$16,300.00
TOTAL ANNUAL PAYMENTS	\$80,000.00
TOTAL CONTRIBUTIONS – PRODUCTION PERIOD	\$440,000.00

APPENDIX 3 BIODIVERSITY OFFSET AREA



APPENDIX 4 REHABILITATION PLAN



**APPENDIX 5
STATEMENT OF COMMITMENTS**

Desired Outcome	Action	Timing														
1 ENVIRONMENTAL MANAGEMENT																
Compliance with all conditional requirements in all approvals, licences and leases.	1.1 Comply with all commitments recorded in Table 5.1. 1.2 Comply with all conditional requirements included in the: • Project Approval; • Environment Protection Licence; • Mining Lease(s); and • Any other approvals.	Continuous and as required.														
All operations conducted in accordance with all relevant documentation.	1.3 Undertake all activities in accordance with the accepted <i>Mining Operations Plan</i> , environmental procedures, safety management plan and/or site-specific documentation.	Continuous and as required.														
2 AREA OF ACTIVITIES																
All approved activities are undertaken generally in the location(s) nominated on the figures shown in Sections 2 and 4.	2.1 Clearly mark on the ground, and where appropriate, survey the boundaries of the areas of proposed disturbance.	Prior to the commencement of the relevant activity.														
3 OPERATING HOURS																
All operations are undertaken within the approved operating hours.	3.1 Undertake all activities, where practicable, in accordance with the following operating hours.	Continuous and as required.														
	<table><tr><th>Activity</th><th>Proposed Hours of Operation</th></tr><tr><td>Vegetation clearing and topsoil stripping</td><td rowspan="2">7:00 am to 6.00 pm</td></tr><tr><td>Construction operations – Box cut</td></tr><tr><td>Construction operations – Remainder</td><td rowspan="4">24 hours per day</td></tr><tr><td>Underground mining operations</td></tr><tr><td>Maintenance operations</td></tr><tr><td>Processing operations</td></tr><tr><td>Transportation operations</td><td>7:00 am to 10.00 pm</td></tr><tr><td>Rehabilitation operations</td><td>7:00 am to 6.00 pm</td></tr></table>		Activity	Proposed Hours of Operation	Vegetation clearing and topsoil stripping	7:00 am to 6.00 pm	Construction operations – Box cut	Construction operations – Remainder	24 hours per day	Underground mining operations	Maintenance operations	Processing operations	Transportation operations	7:00 am to 10.00 pm	Rehabilitation operations	7:00 am to 6.00 pm
	Activity		Proposed Hours of Operation													
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	Construction operations – Box cut															
	Construction operations – Remainder		24 hours per day													
	Underground mining operations															
	Maintenance operations															
	Processing operations															
	Transportation operations		7:00 am to 10.00 pm													
Rehabilitation operations	7:00 am to 6.00 pm															

Desired Outcome	Action	Timing
4 ECOLOGY		
Minimise potential impacts on native flora and fauna.	4.1 Develop a <i>Biodiversity Management Plan</i> comprising: • pest animal controls for the control of feral goat, cat, dog, fox; • weed control program for the removal of noxious weeds and reducing further weed invasion; • Grazing Plan using grazing as a management tool but in a controlled manner.	Prior to construction of the Tailings Storage Facility.
	4.1A Develop, in conjunction with EPA, a BioBanking Plan of Management in accordance with the relevant Environmental Protection Agency guidelines comprising a description of: • the existing environment within the Biodiversity Offset Area; • the assessment undertaken to determine the adequacy of the Biodiversity Offset Strategy; • the management measures that would be implemented to ensure that the objectives of the strategy are achieved; and • the method that would be employed to secure the Biodiversity Offset Strategy, including the method to ensure funds are available to implement the strategy.	Within 12 months of the receipt of project approval.
Manage potential impacts on threatened flora and fauna.	4.2 Manage impacts to threatened fauna and communities to ensure that the threatened species and potential habitats recorded within the Project Site are not impacted upon by: • engaging appropriately qualified and experienced ecologists to undertake pre-clearance surveys within areas to be disturbed; • implementation of a Driver's Code of Conduct for all personnel accessing the Project Site for the observation of site speed limit, safe driving protocols, incident management and reporting, noise minimisation;	Continuous throughout the life of the Project.

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Manage potential impacts on threatened flora and fauna. (Cont'd)	• minimisation of impacts to nests and habitats of the recorded threatened species through implementation of administrative controls such as induction toolbox talks and making available fact sheets on the recorded threatened bird species (including descriptions and photographs of the species and their habitats to personnel responsible for vegetation clearing and excavation activities;	Continuous throughout the life of the Project.
	• scheduling the clearing of substantive trees between April to September, where possible, to reduce risk of impact to tree-dependant microbats; Where not practicable, ensure that all hollows suitable for such microbats are inspected prior to clearing operations and roosting bats relocated by a suitably qualified wildlife handler. • implementation of administrative controls comprising induction and toolbox talks to train personnel in the proper management procedures for the handling of any species of bats during tree clearing to prevent infection with zoonoses; • use of suitably qualified personnel to handle the removal of bats of any species.	
	4.3 Mark areas to be cleared of vegetation following pre-clearance survey clearly and inducting workers on the nature and extent of clearing required to minimise no impact to surrounding vegetation.	
	4.4 Park machinery required for the Project within designated areas and/or disturbed areas only away from vegetated areas to be retained.	
	4.5 Examine all trees for the presence of birds or nestlings and arboreal mammals before felling or pushing and commencing with tree removal immediately after visual inspection.	
Manage potential impacts on all flora and fauna.	4.6 Clear hollow-bearing trees or dead stag (if required) within the Surface Facilities Area and Tailings Storage Facility only after a series of alternating 'gradual nudge' (e.g. with a dozer) and 'wait' to allow the occupants of hollows to escape.	During site establishment activities.
	4.7 Undertake no clearing of hollow-bearing trees within the area proposed for the new Back Tank East but allowing them to remain and be flooded <i>in situ</i> .	

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Manage potential impacts on all flora and fauna. (Cont'd)	4.8 Salvage tree trunks, major and minor branches from areas requiring clearing for subsequent relocation to areas to be revegetated.	Continuous throughout the life of the project.
	4.9 Include in inductions the ecological values of the felled trees and to warn against their collection for firewood.	
	4.10 Remove and properly dispose of any noxious or other weeds encountered during site clearing to prevent their spread to other locations within the Project Site, especially to drainage lines and storage dam areas.	
	4.10A Fence relevant sections of the surface facilities area to prevent access by wildlife.	
Minimise impacts to local waterways and downstream creeks.	4.11 Minimise impacts to the local waterways and downstream creeks during expansion of Pete's Tank and construction of the proposed Back Tank East by: • planning of the site establishment activities so that the in-stream work is kept to a minimum and would occur as a single event, where possible; • restricting in-stream work to low-flow periods, where possible; • limit machinery access to one designated location on the bank, create the shortest access track (and as narrow as possible within the constraints of safety and construction requirements) between this location and the point of activity;	During site establishment activities.
Manage potential risk to the health of the biota from the Tailings Storage Facility.	4.12 Manage potential risk to the health of the biota (birds, other wildlife and livestock) from the Tailings Storage Facility through engineering controls (including creating alternative habitats in nearby locations) including: creation of suitable and alternative habitats in the vicinity of the storage dams (expanded Pete's Tank and the proposed Back Tank East by revegetation of the disturbed areas with appropriate endemic native species.	Prior to the commencement of site establishment activities and continuous throughout the life of the project.

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Manage potential risk to the health of the biota from the Tailings Storage Facility. (Cont'd)	4.13 Manage potential risk to the health of the biota (birds, other wildlife and livestock) from the Tailings Storage Facility through administrative controls (policies, procedures, work routines) including; - management of cyanide process solutions and waste streams to protect biota health and the environment by ensuring the concentration of the tailings pumped to the Tailings Storage Facility is less than 10mg/L WAD cyanide; - preparation of detailed emergency response plans for potential cyanide effects;	Ongoing throughout the life of the Project.
	- development of procedures for internal and external emergency notification and reporting; - training workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner; - training workers to understand the hazards associated with cyanide use and discharge; - training appropriate personnel to operate the Project in accordance with procedures that protect the environment; - dissemination of operational and environmental information regarding cyanide use on site to all stakeholders through community consultation process; - initiation of dialogue describing cyanide management procedures being adopted at the site and responsively address identified concerns.	
Ensure that Project-related impacts, if any, are identified as early as possible.	4.14 Implement ongoing monitoring programs to evaluate the effects of cyanide use on wildlife through routine observations on the wildlife, including wildlife utilization and mortality within the Project Site: - recording of observations (via written notes and photography), within three hours of sunrise, of all wildlife visitations and mortality associated with the Tailings Storage Facility; and - recording the supernatant level, the cyanide concentration and the history (cyanide concentration, proportion of solids in the slurry etc.) of the most recent tailings pumped into the Tailings Storage Facility.	

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Ensure that Project-related impacts, if any, are identified as early as possible. (Cont'd)	4.15 Implement ongoing monitoring programs to evaluate the effects of cyanide use on wildlife through cyanide concentration data collection in accordance with industry best practice: - regular sampling and analyses of the supernatant solution from the Tailings Storage Facility and water samples (groundwater and surface waters) from upstream and downstream locations as part of the site's surface and groundwater monitoring program; - sampling as noted above immediately after recording of wildlife death in the vicinity of the Tailings Storage Facility.	Ongoing throughout the life of the project.
	4.16 Undertake monitoring of bat on an annual basis to establish any trend in population changes since commencement of the Project.	
	4.17 Undertake monitoring of the ongoing rehabilitation activities within the Project Site to ensure native vegetation regeneration is successful and to control weed invasion.	During Rehabilitation operations.
	4.18 Conduct annual monitoring of the Grey-crowned Babbler, Hooded Robin, Diamond Firetail and microbat populations including their breeding locations to gauge breeding success and to ensure recovery of local populations are successful following the land disturbing activities.	Ongoing throughout the life of Project.
	4.19 Undertake annual surveys of the Kultarr to establish a population census and compile information for use in the management of this species within the Project site and to allow year to year comparisons of any changes in habitat usage and population trends.	
	4.20 Monitor the rehabilitation activities within the Project Site to ensure native vegetation regeneration is successful and to control weed invasion.	During and following rehabilitation operations.
Manage weeds and pests within the Project Site.	4.21 Implement the industry best practice land management measures e.g. implementation of a weed and feral animal control program as part of a post-project <i>Land Management Plan</i> .	During and following rehabilitation operations.

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Ensure that Project-related impacts, if any, are identified as early as possible.	4.22 Continue with the annual monitoring of the Grey-crowned Babbler, Hooded Robin, Diamond Firetail and microbat populations including their breeding locations to gauge breeding success and to ensure recovery of local populations are successful.	
	4.23 Continue with the annual formal surveys of the Kultarr to establish a population census and compile information for use in the management of this species following rehabilitation activities and to allow year to year comparisons of any changes in habitat usage and population trends.	
Offset residual impacts on native flora and fauna.	4.24 Negotiate and implement an appropriate BioBanking Agreement as described in Section 2 of the <i>Response to Submissions</i> document	Within 12 months of the receipt of project approval.
	4.25 Implement fully the Biodiversity Offset Strategy, including ensuring that the strategy would be implemented in perpetuity and that fences required for the strategy would, where practicable, be constructed on the alignment of existing fences or adjacent to existing tracks or cleared areas.	Ongoing throughout the following the life of the Project.
5 GROUNDWATER		
Prevent hydrocarbon contamination of groundwater.	5.1 Store all hydrocarbon and chemical products within a bunded area complying with the relevant Australian Standard.	Ongoing throughout the life of Project.
	5.2 Refuel mobile equipment within designated, sealed areas of the Project Site. If refuelling is conducted in the field then procedures would be developed to minimise potential hydrocarbon spills.	

Desired Outcome	Action	Timing
5 GROUNDWATER (Cont'd)		
Prevent hydrocarbon contamination of groundwater. (Cont'd)	5.3 Undertake all maintenance works involving hydrocarbons, where practicable, within designated areas of the Project Site such as the maintenance workshop.	Ongoing throughout the life of Project.
	5.4 Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	
	5.5 Ensure all hydrocarbon and chemical storage tanks are either self-bunded or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity or greater where potential exists for multiple containers to fail at the same time.	
Prevention of groundwater contamination.	5.6 Design and construct the Tailings Storage Facility as described in Section 2.6 and in accordance with the requirements of the relevant government agencies. Key design parameters would be as follows. - Construct the floor and walls of the Tailings Storage Facility in a manner that would achieve an appropriate permeability to prevent leachate leakage. - Ensure that the Tailings Storage Facility embankment is keyed into the underlying material in a manner that would prevent down-slope migration of potentially contaminated groundwater from the facility. - Construct seepage collection structures (Collection Drain and Seepage Collection Pond) at the foot of the Tailings Storage Facility embankment and ensure that any captured seepage is automatically pumped back to the Tailings Storage Facility or Process Water Dam. - Install piezometers at appropriate intervals at the base of the Tailings Storage Facility embankment and monitor these regularly to assess the integrity of the facility.	During site establishment activities.
	5.7 Prepare a <i>Groundwater Monitoring Plan</i> as part of the <i>Water Management Plan</i> in consultation with NSW Office of Water, including procedures for: recording of standing water levels and groundwater quality within bores used to supply operational water for the Project, as well as within monitoring bores associated with the tailings storage facility and processing plant;	Prior to the commencement of mining operations.

Desired Outcome	Action	Timing
5 GROUNDWATER (Cont'd)		
Prevention of groundwater contamination. (Cont'd)	- monitoring the standing water levels in neighbouring bores to observe any drawdown effects; and - further investigation of groundwater impacts in the event that identified trigger levels are exceeded.	Prior to the commencement of mining operations.
Ensure that groundwater is not discharged to natural drainage.	5.8 Ensure that all groundwater removed from the proposed underground mine or the production bores is pumped only to the Header Tank, the Raw Water Pond or other water storage constructed in a manner that would ensure that the water would not discharge to natural drainage.	Throughout the life of the Project.
Prevention of groundwater contamination.	5.9 Ensure that material placed within the acid-forming waste rock encapsulation area is preferentially transported back underground as a priority.	As soon as practicable after the initial stope is completed.
	5.10 Implement the following procedures in the event that acid generation within the acid-forming waste rock encapsulation area is identified. - Monitoring of leachate within the Leachate Management Pond would be increased in frequency. - All leachate would be removed to the process water pond as it is generated, limiting the potential for this material to discharge or seep from the pond. - A management plan would be developed to facilitate prompt transportation of acid-forming material back underground or, if this is not practicable, temporary encapsulation of this material.	Following identification of acid generation within the acid-forming waste rock encapsulation area.
6 SURFACE WATER		
Maintenance of surface water quality.	6.1 Prepare a Surface Water Monitoring and Response Plan as part of the Project Site's <i>Water, Sediment and Erosion Control Plan</i> and in consultation with OEH including a description of surface water management structures and procedures to ensure that the criteria identified in Section 4.4.3 any additional criteria included in the Environment Protection Licence or project approval are achieved.	Prior to and during site establishment activities.

Desired Outcome	Action	Timing
6 SURFACE WATER (Cont'd)		
Capture of sediment-laden water flows from project related disturbance.	6.2 Construct sediment and erosion control structures for the separation of clean, dirty and contaminated water on site (as shown in Figure 2.4 and discussed briefly in Section 2.2.4) comprising the following. • Clean water diversions in the vicinity of the Surface Facilities Area and Tailings Storage Facility to divert clean water away from the disturbed areas: • Dirty water diversions to channel water to sediment basins to allow sediment to settle out from dirty water prior to discharge to natural drainage. All outlets would be designed for the 100-year ARI storm event. • Contaminated water collection structures, including downstream of the Tailings Storage Facility and within the processing plant to collect and channel potentially contaminated water to suitable structures for pumping to the Process Water Dam or the Tailings Storage Facility.	Prior to and during site establishment activities.
	6.3 Construct the unpaved access roads (Main Site Access Road and Light Vehicle Road) with a crowned surface to shed water onto surrounding land.	
	6.4 Install mitre drains, where necessary, to reduce concentrated flow.	
	6.5 Ensure access roads would be gravel-sheeted using crushed waste rock.	
	6.6 Design and construct a sealed causeway where the Main Site Access Road crosses Watercourse A approximately 250m from the Main Site Entrance in consultation with NSW Department of Primary Industries – Fisheries and NSW Office of Water.	
	6.7 Ensure that all water management structures where practicable are constructed to the specifications identified in Landcom (2004) and DECC (2008).	

Desired Outcome	Action	Timing
6 SURFACE WATER (Cont'd)		
Capture of sediment-laden water flows from project related disturbance. (Cont'd)	6.8 Inspect all surface water control structures at least quarterly and following any rainfall event of more than 25mm in 24-hours to ensure their adequacy and identify where remedial action is required.	Prior to and during establishment activities.
Manage potential pollutant discharges.	6.9 Ensure processing/tailings water would be contained within a closed loop and re-used within the Processing Plant, and pump tailings to the Tailings Storage Facility following destruction of weak acid dissociable cyanide concentration to <10 ppm.	Ongoing throughout the life of Project.
	6.10 Design and construct the Tailings Storage Facility to prevent leakage of leachate into the groundwater.	During mine design and prior to construction stages.
	6.11 Construct a clean water diversion upstream of the Tailings Storage Facility to completely divert any upslope run-on. This bund would be stabilised to effectively convey the 100-year ARI, time-of-concentration flow from the upstream catchment.	Prior to and during site establishment activities.
	6.12 Construct a seepage collection drain and pond downslope of the Tailings Storage Facility to collect potentially contaminated leachate from the Tailings Storage Facility, if any, and pump it back to the Tailings Storage Facility.	
	6.13 Ensure that all fuel and chemical storage, delivery and handling areas are bunded to 110% of the size of the largest receptacle.	Ongoing throughout the life of Project.
	6.14 Ensure that pumps and fluid lines for the delivery of chemicals or fuels would be bunded and/or protected. Transfer volumes would be monitored at all times to quickly identify any leaks and appropriate action to be undertaken.	
	6.15 Ensure that stormwater trapped in the Settling Ponds and Sediment Basins is pumped back to the Raw Water Dam for reuse in ore processing, or treat with flocculants, if required, to achieve total suspended solids concentration of 50mg/L prior to release.	

Desired Outcome	Action	Timing
6 SURFACE WATER (Cont'd)		
Manage potential pollutant discharges. (Cont'd)	6.16 Install appropriate water management structures within the Processing Plant area to trap incident rainfall and isolate any potentially contaminated from the area, and for the subsequent transfer to the Process Water Dam for reuse.	Ongoing throughout the life of Project.
	6.17 Treat wastewater using aerated wastewater treatment systems and dispose of the secondary-treated effluent in dedicated, vegetated, irrigation areas.	
	6.18A Undertake ecotoxicological testwork for proposed flocculants on a water flea (e.g. cladoceran), a relevant fish species and a freshwater alga to provide confidence that the flocculent is suitable for use within the Project Site, namely that the acute toxicities (50 percent lethal concentrations (LC50)) are appropriate.	Prior to the commencement of processing operations.
Manage surface water flow in rehabilitated areas.	6.18 Develop a <i>Soil and Water Management Plan</i> to accompany the capping works, including the exact nature of the capping procedure, at the former Tailings Storage Facility.	During rehabilitation operations.
	6.19 Shape the decommissioned Tailings Storage Facility into a raised plateau with a shallow dome profile so that water would be shed from its surface as sheet flow without concentration.	
	6.20 Ensure that rehabilitation, including the placement of soil and revegetation with endemic native species is undertaken promptly once sections of the Project Site are no longer required for mining-related purposes.	
	6.21 Construct surface water control structures on the rehabilitated landform as required to limit the potential for erosion of newly placed soils by implementing the following. - Retain clean water diversion structures upstream of the Tailings Storage Facility. These structures would be designed to withstand a 100 year ARI rainfall event. - Install an appropriate number of engineered, drop structures on the rehabilitated face of the former Tailings Storage Facility to safely transfer surface water down to original ground level, and to prevent erosion of the embankment at the location of these structures.	
	6.22 Ensure that sediment control structures constructed for the Project remain in place until rehabilitated areas are sufficiently stabilised.	

Desired Outcome	Action	Timing
6 SURFACE WATER (Cont'd)		
Manage surface water flow in rehabilitated areas. (Cont'd)	6.23 Develop a <i>Water Management Plan</i> for the Project Site in consultation with NSW Office of Water , comprising (in part): • A <i>Surface Water Monitoring and Response Plan</i>; • An <i>Erosion and Sediment Control Plan</i>; • A <i>Site Water Balance</i>.	Following project approval.
7 NOISE AND BLASTING		
Noise generated by operational activities does not exceed DECCW nominated criteria nor significantly impacts on neighbouring landowners and/or residents.	7.1 Install frequency modulated reversing alarms on all mobile equipment.	Ongoing.
All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	7.2 Regularly service all equipment in accordance with manufacturer's instructions.	
	7.3 Ensure that all truck drivers would be required to comply with the Hera Resources Pty Limited's Driver Code of Conduct outlining procedures for reducing noise impacts during transportation within the Project Site and off site.	Prior to and continuous during mining operations.
	7.4 Undertake noise monitoring at the residences most likely to be affected by noise generated by the Project.	Continuous during mining operations.
	7.5 Maintain an open dialogue with the surrounding community and neighbours to ensure any concerns over noise or vibration are addressed.	Prior to commencement of mining operations.
	7.6 Ensure that all blasts are designed by a suitably qualified and experienced blasting engineer or shot-firer such that each is designed in accordance with the ANZECC Blasting Guidelines to achieve the relevant criteria at the closest residence.	Continuous during mining operations.
	7.7 Prepare a <i>Noise Management and Monitoring Program</i> prior to the commencement of mining activities which would incorporate the specific details of all noise controls and provide measures to address noise criteria exceedances and/or complaints should they occur.	Following project approval and prior to operations.

Desired Outcome	Action	Timing
8 ABORIGINAL HERITAGE		
Site activities are undertaken without impacting upon any Aboriginal heritage items.	8.1 Undertake further site inspections of those sections of the Mine Camp and Tailings Storage Facility that were not surveyed during the 2010 OzArk assessment prior to disturbing the ground to confirm the assessment that there are no objects or sites of Aboriginal heritage significance within the proposed areas of disturbance.	Prior to the commencement of site establishment operations.
	8.2 Cease all work in the vicinity of an Aboriginal sites or objects found during ground-clearing construction works, and seek advice from OEH, the National Parks and Wildlife Service and Condobolin and Cobar Local Aboriginal Land Councils will be sought on how to best proceed. Work would not recommence in the area of the find, until the officials contacted have inspected the material and permission has been given to continue with the construction works.	As required.
	8.3 Implement the following procedures, if during the life of the Project suspected human remains are identified within the Project Site. • Step 1 – the suspected skeletal remains would not be touched or disturbed. • Step 2 – A buffer zone of 50m x 50m would to be established around the suspected remains and all work in the vicinity of the suspected remains to be suspended until the area has been assessed. • Step 3 – The NSW Police and the DECCW to be contacted to make an assessment of the discovery. If appropriate, mitigation procedures to be developed in consultation with the registered stakeholders.	
9 HISTORICAL HERITAGE		
Site activities are undertaken without impacting upon any significant non-Aboriginal heritage items.	9.1 Ensure trees identified to possess toe-holds and bark-rings located east of the project Site (listed in Table 4of OzArk 2011b) are not removed.	Ongoing throughout the life of Project.

Desired Outcome	Action	Timing
10 AIR QUALITY AND ENERGY		
Minimise impacts to air quality relating to the Project.	10.1 Limit disturbance to the minimum area necessary for mining and associated activities.	Ongoing throughout the life of Project.
	10.2 Spray unsealed access roads and other trafficked areas with water carts at a rate of 2L/m ² /hour, as required, when visible dust is generated.	
	10.3 Incorporate water spray facilities at all transfer points in the crushing and screening circuit within the Processing Plant.	
	10.4 Maintain ore handling areas / stockpiles in a moist condition by using water carts to water down areas affected by wind-blown and traffic-generated dust.	
	10.5 Install suitable dust control measures within the crushing and dry screening components of the Processing Plant, including water sprays, to ensure that the required level of dust suppression is achieved. Alternatively, enclose these components, with venting to a fabric filter or equivalent device for removal of particulate matter from the airstream prior to release.	
	10.6 Maintain approximately 75% of the Tailings Storage Facility area as wet, with emissions restricted to 25% of the surface area of the Tailings Storage Facility.	
	10.7 Cap or otherwise treat the Tailings Storage Facility during rehabilitation activities following completion of operations.	
	10.8 Maintain and inspect dust control systems, in accordance with supplier recommendations.	
	10.9 Ensure site personnel understand fundamentals of air emissions, and have been trained to make timely reporting of any visible air emissions to allow for prompt and appropriate action to be undertaken for the management of the identified emissions.	

Desired Outcome	Action	Timing
10 AIR QUALITY AND ENERGY (Cont'd)		
Minimise impacts to air quality relating to the Project. (Cont'd)	10.10 Install an onsite real-time meteorological monitoring program in accordance with the recommendations of the OEH's <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> (DEC, 2007).	Ongoing throughout the life of Project.
	10.11 Use biodegradable dust suppressants with insignificant environmental impacts for controlling dust emissions from unsealed roads and disturbed areas.	
	10.12 Minimise drop-heights from the ROM bin to the primary crusher.	
	10.13 Establish vegetative cover, using endemic native grass species, over all long term topsoil stockpiles not regularly used.	
	10.14 Profile all surfaces to reduce velocity of overland winds.	
	10.15 Contour the final landform shape to avoid strong wind flows and smooth gradients to reduce turbulence at surface.	
	10.16 Apply vegetative cover using endemic native grass species, to non-operational exposed surfaces, e.g. Tailings Storage Facility wall, ROM pad batters, as soon as practical after disturbance.	
	10.17 Reshape, topsoil and rehabilitate completed Waste Rock Emplacement areas as soon as practicable after they are no longer required for mining-related purposes.	
	10.18 Progressively optimise the underground mine design to minimise travel distances for mining equipment and re-handling of waste and ore material.	
	10.19 Use mining equipment which is regularly maintained and serviced to maximise efficiency.	
	10.20 Optimise the design of the Processing Plant to: • minimise the amount of conveyor operating hours with zero load; • maximise the use of gravity to move material through the Processing Plant reducing the need for pumping; and • maximise the use of energy efficient motors in major pieces of the Processing Plant.	
	10.21 Adopt the use of energy efficient lighting technologies and hot water and air conditioning systems wherever practical.	

Desired Outcome	Action	Timing
10 AIR QUALITY AND ENERGY (Cont'd)		
Minimise impacts to air quality relating to the Project. (Cont'd)	10.22 Maximise the recovery of recyclable materials where practicable, including: - waste hydrocarbons; - polyethylene; and - scrap metals.	Ongoing throughout the life of Project.
	10.23 Minimise waste sent to landfill through the development of appropriate purchasing and waste management plans.	
	10.24 Progressively review and implement energy efficiency measures throughout the life of the Project.	
	10.25 Prepare an Air Quality Monitoring Program in consultation with OEH and the surrounding community, including: - installation of a high volume air sampler at the Mine Camp, initially for a period of 12 months, with continued monitoring after that period to be determined in consultation with Office of Environment and Heritage; and - procedures for monitoring particulates within exhaust air in the proposed ventilation rise.	Prior to the commencement of site establishment operations.
	10.26 Install an onsite real-time meteorological monitoring program in accordance with the recommendations of OEH's Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007).	
11 TRAFFIC		
Achieve safe and efficient transport operations.	11.1 Construct the Main Site Entrance intersection on Burthong Road and upgrade of the existing site access intersection to a Basic left turn (BAL) rural intersection treatment in accordance with RTA's Austroads guidelines to cater for 36m road trains and light vehicle/light rigid trucks respectively.	During site establishment operations.
	11.2 Regularly inspect and clear long grass and bushes that grow on the road shoulder to maintain the maximum possible sight distance	Ongoing throughout the life of Project.
	11.3 Treat internal roads with chemical suppressants, where appropriate, to minimise dust generation.	

Desired Outcome	Action	Timing
11 TRAFFIC (Cont'd)		
Achieve safe and efficient transport operations. (Cont'd)	11.4 Restrict vehicle speed to 40km/hr.	Ongoing throughout the life of Project.
	11.5 Ensure that all vehicles transporting bulk concentrate are loaded using a front-end loader fitted with a bucket load indicator to avoid overloading.	
	11.6 Ensure product is transported from the Project Site between the hours of 7:00am and 10:00pm.	
	11.7 Prepare, implement and enforce a Driver's Code of Conduct for all heavy vehicle drivers accessing the Project Site regularly.	
	11.8 Investigate any complaints in relation to transportation of concentrate promptly.	
	11.9 Prepare and implement a Traffic Management Plan to document relevant procedures to be implemented during the intersection construction works and throughout the life of the Project.	
Ensure adequate maintenance of local roads.	11.10 Negotiate an appropriate arrangement with Cobar Shire Council for the transportation of concentrate on Berthong and Priory Tank Roads at an indicative rate of \$1.82/t.	Prior to the commencement of concentrate transportation.
Ensure roads and tracks do not adversely impact on fish passage within the Project Site.	11.11 Ensure that all roads and tracks across waterways are designed and constructed. - in consultation with Department of Primary Industries – Fisheries and in accordance with the documents “<i>Policy and Guidelines for Fish Friendly Waterway Crossings (2004)</i>” and “<i>Why do Fish Need to Cross the Road? - fish passage requirements for waterway crossings</i>”; and - in consultation with NSW Office of Water and in accordance with the Office of Water's Guidelines for Controlled Activities.	Prior to and during site establishment operations.
12 SOILS AND LAND CAPABILITY		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion.	12.1 Minimise handling of all soils to minimise their structural damage by ensuring the areas for stripping and stockpiling are clearly identified.	During site establishment operations.
	12.2 Strip topsoils within the Surface Facilities Area to a depth of 200mm and store in stockpiles no more than 2m high.	
	12.3 Strip topsoils within the Tailings Storage Facility and other areas of the Project Site to a depth of 300mm and store in stockpiles no more than 2m high.	

Desired Outcome	Action	Timing
12 SOILS AND LAND CAPABILITY (Cont'd)		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. (Cont'd)	12.4 Strip subsoil in relevant areas to bedrock and store in stockpiles no more than 3m in high.	During site establishment operations.
	12.5 Refrain from stripping or placing soils during wet conditions.	
	12.6 Ensure that machinery used for stripping operations would dump their loads neatly and uniformly so that the stockpile does not require further forming prior to establishment of vegetation cover.	Ongoing throughout the life of Project.
	12.7 Avoid driving of machinery on the topsoil and subsoil stockpiles once the stockpiles are created to minimise compaction and further degradation of soil structure.	
	12.8 Construct upslope water diversion banks to direct overland surface water flow away from the soil stockpiles.	
	12.9 Implement downslope sedimentation controls as required, until the surface of the soil stockpiles are appropriately stabilised using groundcover species.	Ongoing throughout the life of Project.
	12.10 Ensure the formed soil stockpile surfaces would have a generally uneven surface that is as 'rough' as possible, in a micro-sense, to assist in surface water runoff control and seed retention and germination.	
	12.11 Sow soil stockpiles with stabilising groundcover, comprising endemic native species as soon as possible after placement and water, if necessary, to speed up establishment and attain a cover of at least 30% to minimise erosion and sedimentation.	
	12.12 Ensure slopes less than 2% are rehabilitated with Red Earths with due regard to the following precautionary measures: - no furrowing would be used; - maintain the length of exposed slopes to less than 80m; - use windrows of mulch placed along the contours and ensuring these would not act as drains themselves.	
	12.13 Ensure slopes between 2% and 10% have a concave profile and are covered with Lithosols.	
	12.14 Ensure slopes of more than 10% are protected with rock-pitching.	

Desired Outcome	Action	Timing
12 SOILS AND LAND CAPABILITY (Cont'd)		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. (Cont'd)	12.15 Ensure that during soil placement operations soil is placed directly onto a scarified surface without compaction and in correct order, namely topsoil overlying subsoil.	Ongoing throughout the life of Project.
	12.16 Add, where appropriate, organic matter comprising composted cleared vegetation.	
	12.17 Use organic material in preference to fertilizers during rehabilitation.	
	12.18 Ensure soil management procedures are developed in accordance with Landcom (2004) and DECCW (2008).	
13 VISUAL AMENITY		
Limit the visibility of operational areas from nearby residences.	13.1 Construct the Processing Plant and other on-site infrastructure from non-reflective, neutral coloured material, where possible.	Ongoing throughout the life of Project.
	13.2 Progressively rehabilitate disturbed sections of the Project Site no longer required for the Project, and re-vegetate areas that are bare or only have remnant vegetation.	
	13.3 Undertake active dust management measures to reduce the potential for the creation of a 'dust cloud', especially during site establishment activities.	
	13.4 Manage waste within the Project Site in an appropriate manner such that the site will not become littered with wind-blown rubbish.	
	13.5 Maintain the Project Site in a clean and tidy condition at all times.	
	13.6 Ensure night-time lighting is directed towards the active areas of operation only and towards the ground to minimise the light spill from the Project Site.	
	13.7 Ensure lighting is turned off when not required.	
14 BUSHFIRE		
Avoidance of any fires on site, particularly in native vegetation.	14.1 Ensure that refuelling is undertaken within designated fuel bays or within cleared areas of the Project Site.	Ongoing throughout the life of Project.
	14.2 Implement a no smoking policy in all but designated sections of the Project Site.	
	14.3 Ensure fire extinguishers are maintained within all vehicles.	

Desired Outcome	Action	Timing
14 BUSHFIRE (Cont'd)		
Avoidance of any fires on site, particularly in native vegetation. (Cont'd)	14.4 Ensure clearing during high or extreme bushfire hazard conditions (as defined by the NSW Rural Fire Service) would be avoided.	Ongoing throughout the life of Project.
	14.5 Ensure there is a focus on house-keeping.	
	14.6 Ensure that vegetation clearing extends at least 15m from all built infrastructure.	
	14.7 Ensure that a water cart available to assist in extinguishing any fire ignited.	
	14.8 Liaise with the Rural Fire Service, Cobar Shire Council and Office of Environment and Heritage (NPWS) to determine when back-burning or fire control activities are planned.	
	14.9 Ensure access to on-site water storages for the NSW Rural Fire Services is available in the event of a fire within or surrounding the Project.	
15 HAZARDOUS CHEMICAL & WASTE MANAGEMENT		
Implement adequate controls for the management of hazardous chemicals.	15.1 Manage the Project Site in accordance with NICNAS Category 1 of <i>Priority Existing Chemical Assessment Report No 31 – Sodium Cyanide</i> (Commonwealth Department of Health and Ageing) to ensure that adequate controls exist to reduce weak acid dissociable cyanide concentration to <10 ppm prior to discharge to the Tailings Storage Facility.	Prior to, during and following the life of the Project.
	15.2 Store and manage all chemicals in accordance with the <i>Hydrocarbon and Chemical Management Plan</i> prepared for the site, and the <i>Material Safety Data Sheets</i> of the individual chemicals and reagents.	
	15.3 Ensure sodium cyanide and other toxic chemicals are stored in accordance with the requirements of <i>AS/NZS 4452- The Storage and Handling of Toxic Substances</i> .	
	15.4 Ensure that dangerous goods are transported in accordance with the requirements of the " <i>Australian Code for the Transport of Dangerous Goods by Road and Rail- Current Edition</i> ."	
	15.5 Train employees using hazardous chemicals in their proper handling and spill management techniques.	
	15.6 Dispose of excess chemicals and reagents no longer required for the Project properly using qualified personnel for their removal and transfer to appropriate licensed facility for destruction or reuse.	

Desired Outcome	Action	Timing
15 HAZARDOUS CHEMICAL & WASTE MANAGEMENT (Cont'd)		
Manage waste using the hierarchy minimise waste production, reuse and recycle materials, and dispose of waste not able to be recycled.	15.7 Manage non-production waste in accordance with the objects of the <i>Waste Avoidance and Resource Recovery Act 2000</i> and operate the Project against the hierarchy of avoidance of unnecessary resource consumption, resource recovery (including reuse, reprocessing, recycling and energy recovery where practical), and disposal of materials only after no uses have been identified for them.	Prior to, during and following the life of the Project.
	15.8 Encourage the most efficient use of resources, aim for a continual reduction in waste generation, and thus reduce environmental harm in accordance with the principles of ecologically sustainable development.	
Ensure that contaminated land is appropriately identified and managed	15.9 Ensure that a contaminated land assessment is undertaken prior to the commencement of decommissioning operations and that any contaminated land is managed in accordance with the relevant guidelines applicable at the time.	Prior to the commencement of decommissioning operations.
16 SOCIO ECONOMIC		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site.	Social and Community	Prior to, during and following the life of the Project.
	16.1 Continue to engage in regular dialogue with neighbours surrounding the Project Site in relation to the Project activities and maintain an "open door" policy for interested parties to discuss aspects of proposed activities that may be perceived as problematic.	
	16.2 Support community organisations, groups and events, as appropriate, and review any request by a community organisation for support or assistance to resolve any issues raised throughout the life of the Project.	Prior to, during and following the life of the Project.
	16.3 Form and maintain a Community Consultative Committee (CCC) and which would include representative members of the surrounding community and Cobar Shire Council.	
	16.4 Regularly brief the CCC and wider community on activities within the Project Site and seek feedback in relation to any perceived or otherwise of Project-related impacts. Seek advice on how to provide assistance to resolve issues raised by any member of the community in an effective, fair and equitable manner.	

Desired Outcome	Action	Timing
16 SOCIO ECONOMIC (Cont'd)		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site. (Cont'd)	16.5 Instigate and maintain a community complaints telephone line, and ensure this mechanism of complaints receipt by the Proponent is advertised widely using flyers and verbal announcements at community consultation meetings.	Prior to, during and following the life of the Project.
	16.6 Negotiate with Council and the surrounding Nymagee community to support (either financially or in-kind) one or more community projects in accordance with the documents entitled Cobar Shire Council Social Plan 2011-2016 and the Cobar Shire Community Strategic Plan (in preparation).	
	Employment and Training	
	16.7 Give preference when engaging new employees, where practicable, to candidates from the surrounding community over candidates with equivalent experience and qualifications from elsewhere and ensure that the mining and other contractors do so as well.	
	16.8 Encourage the involvement of the local Aboriginal community in the workforce.	
	16.9 Encourage and support participation of locally-based employees and contractors in training or education programs to impart the appropriate skillsets and qualifications in them for the continued development of the economic growth within the surrounding communities following Project completion.	
	Economic Contribution and Development	
	16.10 Give preference, where practicable and cost-competitive, to suppliers of equipment, services or consumables located within the surrounding community.	
	16.11 Assist community members and others, as appropriate, to establish complementary businesses where those businesses would provide a benefit to the community through increased economic development.	
	16.12 Assist Cobar Shire Council to promote and encourage economic development that would continue beyond the Project life.	

Desired Outcome	Action	Timing
16 SOCIO ECONOMIC (Cont'd)		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site (cont'd).	Infrastructure and Services	Prior to, during and following the life of the Project.
	16.13 Ensure that infrastructure and services established as part of the Project would remain available for alternative uses throughout the life of the Project and upon cessation of mining activities.	
	16.14 Encourage and support, in consultation with the local community, the provision of services to the community. These may include health, education, transportation and other services.	During rehabilitation operations.
	Rehabilitated Lands	
	16.15 Ensure that the land capability of those sections of the final landform to be used for grazing is similar to the current land capability.	
	16.16 Ensure the final landform is free flowing and geotechnically stable.	
17 ENVIRONMENTAL MONITORING & DOCUMENTATION		
Ongoing monitoring and reporting of Project-related environmental impacts.	17.1 Establish an environmental monitoring program for the Project Site and present results of the monitoring program in the <i>Annual Environmental Management Report</i> .	Prior to, during and following the life of the Project.
	17.2 Implement a <i>Biodiversity Monitoring Program</i> to identify potential Project-related impacts on surrounding flora and fauna during the life of the Project.	
	17.3 Implement a <i>Property Vegetation Plan</i> (in accordance with <i>Native Vegetation Act 2003</i> for the management of the proposed Biodiversity Offset Area and consistent with the Project's Biodiversity Offset Strategy.	
	17.4 Implement a <i>Noise Management and Monitoring Program</i> prior to the commencement of mining activities.	
	17.5 Implement the Project's <i>Air Quality Monitoring Program</i> .	
	17.6 Implement the Project's <i>Groundwater Monitoring and Response Program</i> .	
	17.7 Implement the Project's <i>Surface Water Monitoring and Response Program</i> .	
	17.8 Implement a <i>Traffic Management Plan</i> .	

Desired Outcome	Action	Timing
17 ENVIRONMENTAL MONITORING & DOCUMENTATION (Cont'd)		
Ensure appropriate documentation of the proposed mining-related activities.	17.9 The Proponent would prepare the following documentation. • <i>Mining Operations Plan.</i> • <i>Biodiversity Management Plan.</i> • <i>Water, Sediment and Erosion Control and Management Plan.</i> • <i>Noise Management and Monitoring Program.</i> • <i>Groundwater Monitoring and Response Program.</i> • <i>Surface Water Monitoring and Response Program.</i> • <i>Air Quality Monitoring Program.</i> • <i>Traffic Management Plan.</i> • <i>Driver's Code of Conduct.</i> • <i>Hydrocarbon, Chemical and Reagent Management Plan.</i>	As indicated previously.