# **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<br>Part Lot 1730 DP 763521<br>Part Lot 3129 DP 765334 |
| Project:                                    | Hera Project   |
| Blue type represents July 2013 Modification | n  |

Blue type represents July 2013 Modification Green type represents November 2014 Modification Orange type represents February 2016 Modification Light blue type represents September 2016 Modification Red type represents December 2019 Modification Purple type represents June 2021 Modification

The Department has prepared a consolidated version of the consent which is intended to include all modifications to the original determination instrument.

The consolidated version of the consent has been prepared by the Department with all due care. This consolidated version is intended to aid the consent holder by combining all consents relating to the original determination instrument but it does not relieve a consent holder of its obligation to be aware of and fully comply with all consent obligations as they are set out in the legal instruments, including the original determination instrument and all subsequent modification instruments.

NSW Government

TABLE OF CONTENTS

| DEFINITIONS  | 3  |
|--|--|
| ADMINISTRATIVE CONDITIONS  | 5  |
| Obligation to Minimise Harm to the Environment<br>Terms of Approval<br>Limits on Approval<br>Structural Adequacy<br>Demolition<br>Protection of Public Infrastructure<br>Operation of Plant and Equipment<br>Staged Submission of Any Strategy, Plan or Program<br>Surrender/Modification of Approvals<br>Planning Agreement | 5<br>5<br>6<br>6<br>6<br>6<br>6<br>6<br>6<br>6<br>6              |
| ENVIRONMENTAL PERFORMANCE CONDITIONS   | 7  |
| Noise<br>Blasting<br>Air Quality and Greenhouse Gas<br>Meteorological Monitoring<br>Soil and Water<br>Biodiversity<br>Heritage<br>Transport<br>Visual<br>Hazardous Materials<br>Waste<br>Rehabilitation  | 7<br>7<br>8<br>9<br>10<br>12<br>13<br>13<br>14<br>14<br>15<br>16 |
| ADDITIONAL PROCEDURES  | 17   |
| Notification of Landowners<br>Independent Review   | 17<br>17   |
| ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING   | 18   |
| Environmental Management<br>Compliance<br>Independent Environmental Audit<br>Access to Information   | 18<br>19<br>20<br>20   |
| APPENDIX 1: PROJECT LAYOUT PLAN  | 21   |
| APPENDIX 2: PLANNING AGREEMENT TERMS   | 22   |
| APPENDIX 3: BIODIVERSITY OFFSETS   | 23   |
| APPENDIX 4: REHABILITATION PLAN  | 24   |
| APPENDIX 5: STATEMENT OF COMMITMENTS   | 25   |

# DEFINITIONS

Annual Review Approval BCA BCSD

### BSC

CCC Conditions of this approval Consolidated paste fill material Construction

CSC Day

Department DPIE Water EA

EP&A Act EP&A Regulation EPA EPL Evening Feasible

HNSW - ACH Incident

Land

Material harm

The review required by condition 4 of Schedule 5

This project approval

Building Code of Australia

Biodiversity Conservation and Science Directorate Division within the Department

# Bogan Shire Council

Community Consultative Committee

Conditions contained in Schedules 2 to 5 inclusive

Consolidated mix of tailings and cement or similar binder

The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval

Cobar Shire Council

The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays

Department of Planning, Industry and Environment

# Water Group within the Department

The Environmental Assessment titled 'Hera Project, via Nymagee: Environmental Assessment' dated November 2011 and associated response to submissions titled 'Hera Project via Nymagee: Response to Submissions', dated February 2012, as modified by:

- Modification Application 10\_0191 MOD 1 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;
- (b) Modification Application 10\_0191 MOD 2 and supporting document titled 'Hera Mine Section 75W Modification, Concentrate Haulage Route to Hermidale Siding', prepared by YTC Resources, and dated 23 May 2014, and letter from Aurelia Metals dated 28 August 2014;
- (c) Modification Application 10\_0191 MOD 3 and supporting documents titled 'Environmental Assessment for the Hera Mine Modification 3 PA 10\_0191', prepared by R.W. Corkery & Co. Pty. Limited, and dated August 2015, and 'Response to Submissions for the Hera Mine Modification 3 - PA 10\_0191' dated September 2015;
- (d) Modification Application 10\_0191 MOD 4 and supporting documents titled 'Environmental Assessment for the Hera Mine Modification 4 PA 10\_0191', prepared by R.W. Corkery & Co. Pty. Limited, and dated April 2016, and 'Response to Submissions for the Hera Mine Modification 4 - PA 10\_0191' dated May 2016;
- (e) Modification Application 10\_0191 MOD 5 and supporting documents titled 'Statement of Environmental Effects for the Hera Mine Modification 5 PA 10\_0191' prepared by R.W. Corkery & Co. Pty. Limited, March 2019, and 'Response to Submissions for the Hera Mine Modification 5 - PA 10\_0191', May 2016 and additional information titled Hera Mine (SSD4384) MOD5 - Further Information, R.W. Corkery & Co. Pty. Limited, of 18 July 2019; and
- (f) Modification Application 10\_0191 MOD 6 and supporting documents titled 'Modification Report for the Hera Mine Modification 6 MP10\_0191' prepared by R.W. Corkery & Co. Pty. Limited, November 2020 and 'Submissions Report for the Hera Mine Modification 6 MP10\_0191' prepared by R.W. Corkery & Co. Pty. Limited, March 2021

Environmental Planning and Assessment Act 1979

Environmental Planning and Assessment Regulation 2000

**Environment Protection Authority** 

Environment Protection Licence issued under the POEO Act

The period from 6pm to 10pm

Feasible relates to engineering considerations and what is practical to build or to implement

Heritage NSW – Aboriginal Cultural Heritage

# A set of circumstances that causes or threatens to cause material harm to the environment

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

Is harm that:

### or to ecosystems that is not trivial; or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) Department of Regional NSW - Mining, Exploration and Geoscience Implement all reasonable and feasible mitigation measures to reduce the impacts of the development Includes the removal of waste rock and the extraction, processing, handling storage and transportation of ore material Minister for Planning and Public Spaces, or delegate Small in quantity, size and degree given the relative context Activities associated with reducing the impacts of the project prior to or during those impacts occurring Small and unimportant, such as to be not worth considering The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays An occurrence, set of circumstances or development that is a breach of this consent but is not an incident Protection of the Environment Operations Act 1997 Land that is not owned by a public agency or a mining company (or its subsidiary) The project described in the EA 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 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 The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment. Resources Regulator within the Department Secretary of the Department, or nominee The land listed in Appendix 1

The Proponent's commitments in Appendix 5 Transport for NSW

Mining operations

### Minister

Minor Mitigation

Negligible Night

Non-compliance

POEO Act Privately-owned land

Project Proponent

Reasonable

### Rehabilitation

### RR

Secretary Site Statement of Commitments **TFNSW** 

4

# CONSOLIDATED CONSENT

involves actual or potential harm to the health or safety of human beings

# 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 development:
  - (a) in general accordance with the EA; and
  - (b) in accordance with the conditions of this approval.

#### 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 Secretary 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 2025.

Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Secretary. 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 505,000 tonnes of ore on the site in a calendar year;
  - (b) DELETED
  - (c) transport more than 60,000 tonnes of concentrate from the site in a calendar year;
  - (d) transport more than 100,000 tonnes of ore from the site in a calendar year.

### Hours of Operation

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

| Activity  | <b>Operating Hours</b>                        |
|---|---|
| Vegetation clearing and topsoil stripping                         | 7am to 6pm, 7 days per<br>week                |
| Construction (excluding construction of the water management dam) |   |
| Mining, maintenance and processing operations                     | <ul> <li>24 hours, 7 days per weel</li> </ul> |
| Rehabilitation  | Day / Evening                                 |
| Transportation of lead and zinc concentrate                       |   |
| Transportation of ore from the site                               | -<br>Daylight hours,                          |
| Transportation of waste rock to the site                          | 7 days per week                               |
| Construction of the water management dam                          | _   |

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 Secretary, 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. By 30 June 2022 unless otherwise agreed by the Secretary, the Proponent shall amend the planning agreement with CSC, in accordance with Division 7.1 of Part 7 of the EP&A Act, which provides for contributions to CSC. The terms of the planning agreements shall be consistent with the terms outlined in Appendix 2.

If there is any dispute between the Proponent and either of the Councils during the formal drafting of the planning agreement, then any of the parties involved may refer the matter to the Secretary for resolution.

Note: On 11 December 2019 a planning agreement was entered into between the Proponent and Bogan Shire Council. The terms of the agreement are 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           | Nigh              | nt         |
|                               | (LAeq(15-minute)) | (LAeq(15-minute)) | (LAeq(15-minute)) | (LA1(max)) |
| 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 Secretary.

### **Noise Management Plan**

- 3. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. The plan must:
  - (a) be prepared in consultation with the EPA, and submitted to the Secretary 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.

| able 3: Blasting            |  |                          |                            |  |
|-----------------------------|--|--------------------------|----------------------------|--|
| Location                    | Time Period  | Airblast<br>Overpressure | Ground<br>Vibration (mm/s) | Allowable<br>Exceedence                          |
|                             |  | (dB(Lin Peak))           |                            |  |
| Residence                   | Any time   | 120                      | 10                         | 0%   |
| on privately-<br>owned land | Day  | 115                      | 5                          | 5% of total blasts over<br>a period of 12 months |
|                             | Evening  | -                        | 2                          | 5% of total blasts over<br>a period of 12 months |
|                             | Night and all day<br>on Sundays and<br>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 Secretary.
- 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 Secretary.

## **Blast Management Plan**

- 9. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with the EPA, and submitted to the Secretary 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 Secretary.

### **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 | <sup>d</sup> Criterion                         |
|--|------------------|--|
| Total suspended particulate (TSP) matter       | Annual           | <sup>a</sup> 90 μg/m³                          |
| Particulate matter < 10 µm (PM <sub>10</sub> ) | Annual           | <sup>a</sup> <mark>25</mark> μg/m <sup>3</sup> |

Table 5: Short term impact assessment criterion for particulate matter

| Pollutant   | Averaging Period | <sup>d</sup> Criterion |
|---|------------------|------------------------|
| Particulate matter < 10 $\mu$ m (PM <sub>10</sub> ) | 24 hour          | <sup>a</sup> 50 μg/m³  |

Table 6: Long term impact assessment criteria for deposited dust

| Pollutant                   | Averaging Period | Maximum increase in<br>deposited dust level | Maximum total<br>deposited dust level  |
|-----------------------------|------------------|---|--|
| <sup>c</sup> Deposited dust | Annual           | <sup>b</sup> 2 g/m <sup>2</sup> /month      | <sup>a</sup> 4 g/m <sup>2</sup> /month |

Notes to Tables 4-6:

- <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the project on its own);
- <sup>c</sup> 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
- <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.
- 13. 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**

- 14. The Proponent shall:
  - (a) 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;
  - (b) minimise any visible air pollution generated by the project;
  - (c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d in Tables 4-6);
  - (d) take all practical measures to minimise dust emissions from the tailings storage facility; and
  - (e) ensure that trucks transporting concentrate cover their loads at all times.

### Air Quality and Greenhouse Gas Management Plan

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

# METEOROLOGICAL MONITORING

16. 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.

## Water Supply

17. 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 Secretary.

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 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 20 mg/L (90<sup>th</sup> percentile) and 30mg/L (maximum).
- 20. The concentration of Weak Acid Dissociable (WAD) cyanide at the discharge point to the process water dam shall not exceed 20 mg/L (90<sup>th</sup> 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 DPIE Water, and to the satisfaction of the Secretary.

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 Secretary 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 Secretary.

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 x 10<sup>-9</sup> m/s to a depth of at least 900 millimetres of clay (or equivalent);
  - (b) the tailings storage facility (except for the seepage collection pond) is lined to achieve a permeability of no less than 1 x 10<sup>-8</sup> m/s to a depth of at least 600 millimetres of clay (or equivalent); and
  - (c) the water management dam is lined to achieve a permeability of no less than 1 x 10<sup>-9</sup> m/s to a depth of at least 1000 millimetres of geosynthetic materials and/or 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 Secretary.

- 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 Secretary. This plan must be prepared in consultation with EPA and DPIE Water by suitably qualified and experienced persons whose appointment has been approved by the Secretary, and submitted to the Secretary 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 in accordance with the relevant requirements in the Managing Urban Stormwater: Soils and Construction (Landcom, 2004) manual, or its latest version; and water storages, including the tailings storage facility and water management dam, raw water
    - water storages, including the tailings storage facility and water management dam, 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 and water management dam, 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;
- 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; and
- reporting procedures for the results of the monitoring program
- (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 water management dam 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 and water management dam;
  - 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 guality 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 and water management dam, 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).

### **Paste Fill**

- 25A. Tailings material permitted to be used to backfill stopes is limited to consolidated paste fill material.
- 25B. The Proponent must ensure material used to backfill stopes is physically and chemically stable.
- 25C. The Proponent shall commission a suitably qualified expert, whose appointment has been endorsed by the Secretary to:
  - (a) carry out trials to clarify the physical and leaching characteristics of the paste fill and set technical specifications for the production of the consolidated paste fill material to meet the performance measures in Condition 25B;

- (b) prepare a program for the ongoing testing of the consolidated paste fill material to ensure it meets these technical specifications; and
- (c) prepare a report on the findings of the trial and proposed implementation of the testing program, to the Secretary's satisfaction prior to backfilling stopes with consolidated paste fill material
- 25D. The Proponent must implement the approved program in Condition 25C.

# BIODIVERSITY

### **Biodiversity Offset Strategy**

- 26. By 31 July 2016, the Proponent shall prepare a Biodiversity Offset Strategy for the project to the satisfaction of the Secretary. The Strategy must:
  - (a) be prepared in consultation with BCSD;
  - (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 Secretary.
- 27A. Within two years of commencing construction of the MOD 5 water management dam, unless the Secretary agrees otherwise, the Proponent must retire biodiversity credits of a number and class identified in Table 6.1 below. The retirement of credits must be carried out in accordance with the Biodiversity Offsets Scheme of the *Biodiversity Conservation Act 2016*, to the satisfaction of the Biodiversity Conservation Trust.

Table 6.1: Ecosystem Credit Requirements

| Vegetation Community   | PCT ID | Credits Required |
|--|--------|------------------|
| Poplar Box - Gum Coolabah - White<br>Cypress Pine shrubby woodland in the<br>Cobar Peneplain Bioregion | 103    | 300              |

27B. Within two years from the date of approval of MOD 6, unless the Secretary agrees otherwise, the Proponent must retire biodiversity credits of a number and class identified in Table 6.2 below. The retirement of credits must be carried out in accordance with the Biodiversity Offsets Scheme of the *Biodiversity Conservation Act 2016*, to the satisfaction of the Biodiversity Conservation Trust.

| Vegetation Community   | PCT ID | Credits Required |
|--|--------|------------------|
| Dwyer's Red Gum - White Cypress Pine -<br>Currawang low shrub-grass woodland of<br>the Cobar Peneplain Bioregion | 184    | 48               |
| Gum Coolabah woodland on sedimentary<br>substrates mainly in the Cobar Peneplain<br>Bioregion                    | 104    | 12               |

### 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 Secretary.

### **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 Secretary for approval. This plan must:
  - (a) be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with BCSD;
  - (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 Bluegrass (*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 Secretary 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 Biodiversity Stewardship 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 Secretary.

### **Conservation Bond**

31. Within three months of the approval of the Biodiversity Management Plan, unless otherwise agreed by the Secretary, 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 Secretary, the Secretary will release the conservation bond. If the offset strategy is not implemented to the satisfaction of the Secretary, the Secretary will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the biodiversity offset.

Note: In the event that a Biodiversity Stewardship Agreement is entered into with respect to the biodiversity offsets for the project, a conservation bond or equivalent funding mechanism lodged under such an Agreement may be used to satisfy condition 31 with the agreement of the Secretary.

## HERITAGE

- 32. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Secretary. The Plan must:
  - (a) be prepared in consultation with HNSW ACH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);
  - (b) be submitted to the Secretary 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 Secretary, 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 CSC, and to the satisfaction of CSC.
- 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 Secretary, 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 CSC.
- 35A. Prior to commencing the transport of concentrate to the Hermidale rail siding via Nymagee-Hermidale Road, or an alternative date nominated by BSC and CSC (with respect to the works within the relevant local government area), the Proponent shall implement, or contribute to the cost of implementing the recommendations in the report titled *Visual Review of Traffic Control Devices Hera Mine to Hermidale Siding* prepared by Geolyse Pty Ltd and dated 7 May 2014, to the satisfaction of BSC and CSC.
- 35B. Prior to commencing the transport of concentrate to the Hermidale rail siding via Nymagee-Hermidale Road or an alternative date nominated by CSC, the Proponent shall upgrade the intersection of Hartwood Street and Milford Street in accordance with the recommendations of the report titled *Geotechnical Investigation of Hartwood Street and Milford Street on Priory Tank Road, Nymagee NSW*, prepared by Envirowest Consulting Pty Ltd dated 23 May 2014 and the relevant AUSTROADS standards, to the satisfaction of CSC.
- 35C. Prior to commencing the transport of ore to Peak Mine, or an alternative date nominated by CSC and TFNSW, the Proponent shall upgrade the intersections of Kidman Way into Priory Tank Road, Kidman Way into the Peak Mine and Burthong Road into Priory Tank Road to provide a basic left turn treatment in accordance with commitments outlined in the EA and the relevant AUSTROADS standards, to the satisfaction of CSC and TFNSW.

Note to conditions 35A-35C: In the event that there is a dispute between the Applicant and BSC or CSC or TFNSW about the implementation of these conditions, then either party may refer the matter to the Secretary for resolution.

# 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 CSC and in accordance with the applicable AUSTROADS standards.

### Monitoring of Concentrate, Ore and Waste Rock 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);
    - (ii) amount of ore transported from the site to Peak Mine (on a monthly basis);
    - (iii) amount of waste rock transported to the site (on a monthly basis); and
    - (iv) the date and time of loaded truck movements from the site; and
  - (b) provide the Secretary with a summary of these truck movements in the Annual Review.

### Transport of Concentrate to Hermidale Rail Siding

37A. The Proponent shall restrict the transport of concentrate to the Hermidale rail siding via the Nymagee-Hermidale Road during daylight hours and limit vehicle movements (entering and leaving the site) to 8 per day, averaged over a calendar month, unless otherwise agreed by the Secretary.

### Transport of Ore and Waste Rock to and from Peak

- 37B. The Proponent must restrict the transport of ore from the site to Peak Mine and the transport of waste rock from Peak Mine to the site during daylight hours to no more than:
  - (a) 44 vehicle movements (entering and leaving the site) per day; and
  - (b) 8 vehicle movements (entering and leaving the site) per hour
  - unless otherwise agreed by the Secretary.

### Traffic Management Plan

- 38. The Proponent shall prepare and implement a Traffic Management Plan to the satisfaction of the Secretary. The plan shall:
  - (a) focus on traffic management along Nymagee-Hermidale Road, Burthong Road, Kidman Way and Priory Tank Road, particularly in the vicinity of the villages of Nymagee and Hermidale;
  - (b) describe the measures to minimise conflicts between road users and ensure that trucks from the mine do not travel through surrounding local roads;
  - (c) be developed in consultation with BSC, CSC and TFNSW and submitted for the approval of the Secretary prior to carrying out any development on the site under this approval; and
  - (d) include a Driver Code of Conduct including:
    - (i) safety initiatives for haulage through residential areas and/or school zones;
    - (ii) an induction process for vehicle operators and regular toolbox meetings;
    - (iii) a public complaint realisation and disciplinary procedure; and
    - (iv) protocols for noise minimisation.

### 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 Secretary.

## HAZARDOUS MATERIALS

### Final Hazard Analysis

40. The Proponent shall prepare a Final Hazards Analysis (FHA) for the project to the satisfaction of the Secretary, 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 Secretary 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 Secretary. The plan must:
  - (a) be prepared in consultation with the relevant government agencies including CSC, TFNSW, EPA, DPIE Water, WorkCover NSW and RR;
  - (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 Secretary 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 CSC,

to the satisfaction of the Secretary.

### Waste Rock Management Plan

- 43. The Proponent shall prepare and implement a Waste Rock Management Plan to the satisfaction of the Secretary. The plan must:
  - (a) be developed in consultation with the EPA and DPIE Water;
  - (b) submitted for the approval of the Secretary 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 bought 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;
  - 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 in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. 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) | <ul> <li>Safe, stable and non-polluting</li> <li>Final land use compatible with surrounding land uses.</li> <li>Final landforms designed to incorporate micro-relief, natural drainage lines and minimise visual prominence by integration with the</li> </ul> |
|                        | <ul> <li>surrounding landscape.</li> <li>Restore self-sustaining ecosystems, including establishing local native plant species.</li> <li>Minimise visual impact of final landforms as far as is reasonable and feasible.</li> </ul>                            |
| Surface infrastructure | To be decommissioned and removed, unless the RR 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<br>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 in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992.* This plan must:
  - (a) be prepared in consultation with the Department, BCSD, MEG, DPIE Water and CSC;
  - (b) deleted
  - (c) be prepared in accordance with any relevant RR 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, 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 Secretary in writing for an independent review of the impacts of the project on his/her land.

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

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, 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 Secretary 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 Secretary.
- 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 Secretary.

### 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 Secretary. This strategy must:
  - (a) be submitted for approval to the Secretary 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 Secretary,
- to the satisfaction of the Secretary.

### 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 Secretary 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 Secretary), the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. 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;
  - (f) describe what measures will be implemented over the next year to improve the environmental performance of the project; and
  - (g) report on water extracted from the site each year (direct and indirect) including water taken under each water licence.

### **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 Secretary.

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 Secretary. 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, CSC, recognised environmental groups and the local community.

## COMPLIANCE

### **Incident Notification**

7A. The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing and identify the development (including the development application number and name) and set out the location and nature of the incident.

### **Non-Compliance Notification**

- 7B. Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must be in writing and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
  - **Note**: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

### INDEPENDENT ENVIRONMENTAL AUDIT

- 9. Within one year of commencement of development on the site under this approval, and every three years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. The audit must:
  - (a) be prepared in accordance with the relevant *Independent Audit Post Approval requirements* (DPE 2018);
  - (b) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (c) be carried out in consultation with the relevant agencies;
  - (d) assess whether the development complies with the relevant requirements in this consent, and any strategy, plan or program required under this consent; and
  - (e) recommend appropriate measures or actions to improve the environmental performance of the development and any strategy, plan or program required under this consent.
- **10.** Within 3 months of commencing an Independent Environmental Audit, or unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations.

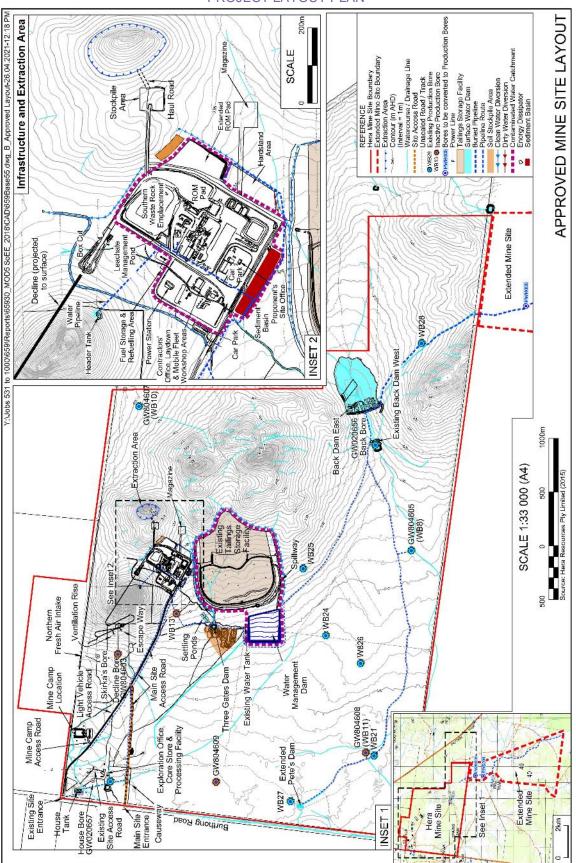
The recommendations of the Independent Environmental Audit must be implemented to the satisfaction of the Secretary.

## ACCESS TO INFORMATION

(f)

- 11. Prior to the commencement of construction on the site, the Proponent shall:
  - 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 Secretary; and
  - (g) keep this information up-to-date,
  - to the satisfaction of the Secretary.

APPENDIX 1 PROJECT LAYOUT PLAN

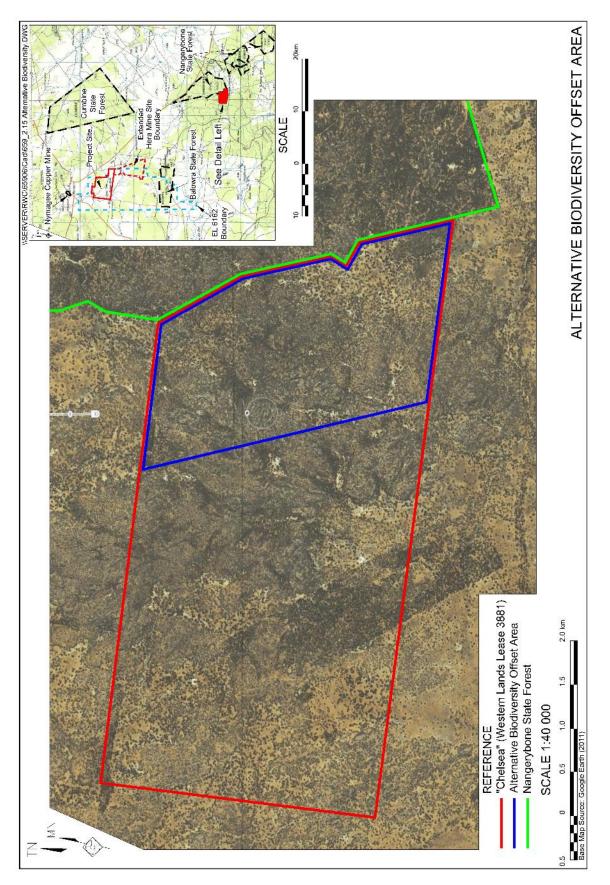


# APPENDIX 2 PLANNING AGREEMENT TERMS

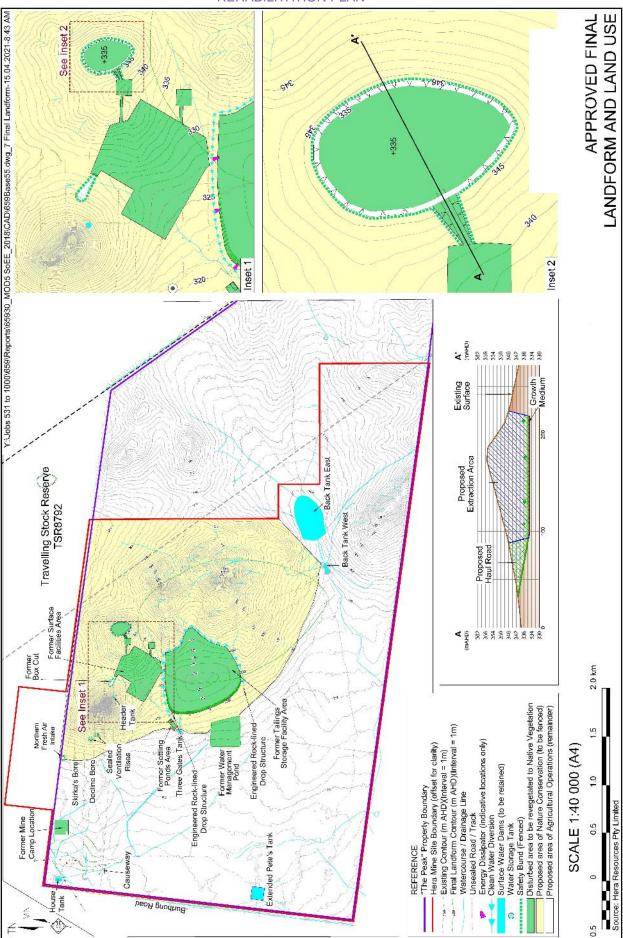
| Funding Area                  | Annual Proponent Contribution      | Council             |
|-------------------------------|------------------------------------|---------------------|
| Road repair and maintenance   |                                    |                     |
| for the transport of          | \$60,000*                          |                     |
| concentrate                   |                                    |                     |
| Community fund                | \$32,000*                          | Cohor Shire Council |
| Administration fee            | 11.5% of total annual contribution | Cobar Shire Council |
| Road repair and maintenance   |                                    |                     |
| for transportation of ore and | \$0.05 per tonne per kilometre*    |                     |
| waste rock                    |                                    |                     |
| Road repair and maintenance   | \$120,000*                         | Bogan Shire Council |

\* Payments are subject to CPI adjustments.

# APPENDIX 3 BIODIVERSITY OFFSET AREA



# APPENDIX 4 REHABILITATION PLAN



# APPENDIX 5 STATEMENT OF COMMITMENTS

| Desired Outcome   | Action   |   |   | Timing                      |
|---|--|---|---|-----------------------------|
| 1 ENVIRONMENTAL   | L MAN  | AGEMENT   |   |                             |
| Compliance with all conditional requirements in all   | 1.1 Comply with all commitments recorded in <b>Table 5.1</b> . |   | Continuous and as required.                               |                             |
| approvals, licences and leases.   | 1.2 Comply with all conditional requirements included in the:  |   |   |                             |
|   |  | Project Approval;   |   |                             |
|   |  | <b>Environment Protecti</b>   | on Licence;   |                             |
|   |  | Mining Lease(s); and  |   |                             |
|   |  | Any other approvals.  |   |                             |
| All operations conducted in accordance with all relevant documentation.   | 1.3  | Undertake all activities in<br>accepted <i>Mining Operation</i><br>procedures, safety manage<br>specific documentation. | ons Plan, environmental                                   | Continuous and as required. |
| 2 AREA OF ACTIVIT   | TIES   |   |   |                             |
| All approved activities are<br>undertaken generally in the<br>location(s) nominated on the<br>figures shown in Sections 2<br>and 4. | 2.1  | Clearly mark on the grour<br>appropriate, survey the bo<br>areas of proposed disturba                                   | Prior to the<br>commencement of the<br>relevant activity. |                             |
| <b>3 OPERATING HOU</b>  | RS   |   |   |                             |
| All operations are<br>undertaken within the   | 3.1  | Undertake all activities, v accordance with the follo   |   | Continuous and as required. |
| approved operating hours.   |  | Activity  | Proposed Hours of<br>Operation                            |                             |
|   | tops   | etation clearing and<br>oil stripping<br>struction operations – Box   | - 7:00 am to 6.00 pm                                      |                             |
|   | Cons<br>Rem<br>Und<br>oper                                     | struction operations –<br>aainder<br>erground mining<br>ations  | 24 hours per day  |                             |
|   |  | ntenance operations<br>ressing operations   | 4   |                             |
|   |  | sportation operations   | 7:00 am to 10.00 pm                                       |                             |
|   |  | abilitation operations  | 7:00 am to 6.00 pm  |                             |

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

| Desired Outcome  | Action   | Timing   |
|--|--|--|
| 4 ECOLOGY (Cont'd)   |  |  |
| Manage potential impacts<br>on threatened flora and<br>fauna. (Cont'd) | *  | Continuous<br>throughout the life<br>of the Project. |
|  | scheduling the clearing of substantive trees<br>between April to September, where possible, to<br>reduce risk of impact to tree- dependant<br>microbats; Where not practicable, ensure that<br>all hollows suitable for such microbats are<br>inspected prior to clearing operations and<br>roosting bats relocated by a suitably qualified<br>wildlife handler. |  |
|  | implementation of administrative controls<br>comprising induction and toolbox talks to train<br>personnel in the proper management<br>procedures for the handling of any species of<br>bats during tree clearing to prevent infection<br>with zoonoses;  |  |
|  | use of suitably qualified personnel to handle<br>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<br>nestlings and arboreal mammals before felling or<br>pushing and commencing with tree removal<br>immediately after visual inspection.   |  |
| Manage potential impacts on all flora and fauna.                       | 4.6 Clear hollow-bearing trees or dead stag (if required)<br>within the Surface Facilities Area and Tailings<br>Storage Facility only after a series of alternating<br>'gradual nudge' (e.g. with a dozer) and 'wait' to<br>allow the occupants of hollows to escape.  | During site<br>establishment<br>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  | l)     |  |   |
| Manage potential impacts<br>on all flora and fauna.<br>(Cont'd)                            | 4.8    | Salvage tree trunks, major and minor branches from<br>areas requiring clearing for subsequent relocation to<br>areas to be revegetated.  | Continuous<br>throughout the life<br>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<br>other weeds encountered during site clearing to<br>prevent their spread to other locations within the<br>Project Site, especially to drainage lines and<br>storage dam areas.   |   |
|  | 4.10A  | Fence relevant sections of the surface facilities area to prevent access by wildlife.  |   |
| Minimise impacts to local<br>waterways and downstream<br>creeks.                           | 4.11   | Minimise impacts to the local waterways and<br>downstream creeks during expansion of Pete's Tank<br>and construction of the proposed Back Tank East<br>by:<br>planning of the site establishment activities so<br>that the in-stream work is kept to a minimum<br>and would occur as a single event, where<br>possible;  | During site<br>establishment<br>activities.   |
|  |        | restricting in-stream work to low-flow<br>periods, where possible;<br>limit machinery access to one designated<br>location on the bank, create the shortest<br>access track (and as narrow as possible within<br>the constraints of safety and construction<br>requirements) between this location and the<br>point of activity;   |   |
| Manage potential risk to the<br>health of the biota from the<br>Tailings Storage Facility. | 4.12   | Manage potential risk to the health of the biota<br>(birds, other wildlife and livestock) from the<br>Tailings Storage Facility through engineering<br>controls (including creating alternative habitats in<br>nearby locations) including: creation of suitable<br>and alternative habitats in the vicinity of the<br>storage dams (expanded Pete's Tank and the<br>proposed Back Tank East by revegetation of the<br>disturbed areas with appropriate endemic native<br>species. | Prior to the<br>commencement of<br>site establishment<br>activities and<br>continuous<br>throughout the life<br>of the project. |

|  | Timing   |
|--|--|
|  |  |
| 4.13 Manage potential risk to the health of the biota<br>(birds, other wildlife and livestock) from the<br>Tailings Storage Facility through administrative<br>controls (policies, procedures, work routines)<br>including;  | Ongoing throughout<br>the life of the Project.   |
| management of cyanide process solutions and<br>waste streams to protect biota health and the<br>environment by ensuring the concentration of<br>the tailings pumped to the Tailings Storage<br>Facility is less than10mg/L WAD cyanide;<br>preparation of detailed emergency<br>response plans for potential cyanide<br>effects; |  |
| development of procedures for internal and external emergency notification and reporting;  | -  |
| training workers and emergency response<br>personnel to manage cyanide in a safe and<br>environmentally protective manner;   |  |
| training workers to understand the hazards<br>associated with cyanide use and<br>discharge;  |  |
| training appropriate personnel to operate the<br>Project in accordance with procedures that<br>protect the environment;  |  |
| dissemination of operational and<br>environmental information regarding cyanide<br>use on site to all stakeholders through<br>community consultation process;  |  |
| initiation of dialogue describing cyanide<br>management procedures being adopted at the<br>site and responsively address identified<br>concerns.   |  |
| 4.14 Implement ongoing monitoring programs to<br>evaluate the effects of cyanide use on wildlife<br>through routine observations on the wildlife,<br>including wildlife utilization and mortality within<br>the Project Site:  |  |
| photography), within three hours of sunrise, of<br>all wildlife visitations and mortality associated<br>with the Tailings Storage Facility; and  |  |
| concentration and the history (cyanide<br>concentration, proportion of solids in the slurry<br>etc.) of the most recent tailings pumped into the<br>Tailings Storage Facility.   |  |
|  | <ul> <li>(birds, other wildlife and livestock) from the Tailings Storage Facility through administrative controls (policies, procedures, work routines) including;</li> <li>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;</li> <li>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.</li> <li>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:</li> <li>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, proportion of solids in the slurry etc.) of the most recent tailings pumped into the</li> </ul> |

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

| Desired Outcome  | Action | 1  | Timing  |
|--|--------|--|---|
| 4 ECOLOGY (Cont'd  | )      |  |   |
| Ensure that Project-related<br>impacts, if any, are<br>identified as early as<br>possible. | 4.22   | Continue with the annual monitoring of the<br>Grey-crowned Babbler, Hooded Robin,<br>Diamond Firetail and microbat populations<br>including their breeding locations to gauge<br>breeding success and to ensure recovery of local<br>populations are successful.   |   |
|  | 4.23   | Continue with the annual formal surveys of the<br>Kultarr to establish a population census and compile<br>information for use in the management of this<br>species following rehabilitation activities and to<br>allow year to year comparisons of any changes in<br>habitat usage and population<br>trends.     |   |
| Offset residual impacts on native flora and fauna.   | 4.24   | Negotiate and implement an appropriate<br>BioBanking Agreement as described in Section<br>2 of the <i>Response to Submissions</i> document   | Within 12 months of<br>the receipt of<br>project approval.      |
|  | 4.25   | Implement fully the Biodiversity Offset Strategy,<br>including ensuring that the strategy would be<br>implemented in perpetuity and that fences required<br>for the strategy would, where practicable, be<br>constructed on the alignment of existing fences or<br>adjacent to existing tracks or cleared areas. | Ongoing throughout<br>the following the life<br>of the Project. |
| 5 GROUNDWATER  |        |  | 1   |
| Prevent hydrocarbon<br>contamination of<br>groundwater.                                    | 5.1    | Store all hydrocarbon and chemical products<br>within a bunded area complying with the relevant<br>Australian Standard.  | Ongoing throughout the life of Project.                         |
|  | 5.2    | Refuel mobile equipment within designated, sealed<br>areas of the Project Site. If refuelling is conducted<br>in the field then procedures would be developed to<br>minimise potential hydrocarbon spills.   |   |

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

| Desired Outcome  | Action   | Timing  |
|--|--|---|
| 5 GROUNDWATER (  | Cont'd)  |   |
| Prevention of groundwater<br>contamination. (Cont'd)                 | neighbouring bores to observe any  | Prior to the<br>commencement of<br>mining operations.   |
| Ensure that groundwater is<br>not discharged to natural<br>drainage. | 5.8 Ensure that all groundwater removed from the<br>proposed underground mine or the production bores<br>is pumped only to the Header Tank, the Raw Water<br>Pond or other water storage constructed in a manner<br>that would ensure that the water would not<br>discharge to natural drainage.   | Throughout the life<br>of the Project.  |
| Prevention of groundwater contamination.                             | waste rock encapsulation area is preferentially  | As soon as<br>practicable after the<br>initial stope is<br>completed.   |
|  | <ul> <li>5.10 Implement the following procedures in the event that acid generation within the acid-forming waste rock encapsulation area is identified.</li> <li>Monitoring of leachate within the Leachate Management Pond would be increased in frequency.</li> <li>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.</li> <li>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.</li> </ul> | Following<br>identification of acid<br>generation within<br>the acid-forming<br>waste rock<br>encapsulation area. |
| 6 SURFACE WATER  |  |   |
| Maintenance of surface<br>water quality.                             | 6.1 Prepare a Surface Water Monitoring and Response<br>Plan as part of the Project Site's <i>Water, Sediment</i><br><i>and Erosion Control Plan</i> and in consultation with<br>OEH including a<br>description of surface water management structures<br>and procedures to ensure that the criteria identified<br>in Section 4.4.3 any additional criteria included in<br>the Environment Protection Licence or project<br>approval are achieved.  | Prior to and during<br>site establishment<br>activities.  |

| Desired Outcome   | Action | l   | Timing   |
|---|--------|---|--|
| 6 SURFACE WATER   | (Cont' | d)  |  |
| Capture of sediment-laden<br>water flows from project<br>related disturbance. | 6.2    | Construct sediment and erosion control structures<br>for the separation of clean, dirty and contaminated<br>water on site (as shown in<br>Figure 2.4 and discussed briefly in Section<br>2.2.4) comprising the following.<br>Clean water diversions in the vicinity of the<br>Surface Facilities Area and Tailings Storage<br>Facility to divert clean water away from the<br>disturbed areas:<br>Dirty water diversions to channel water to<br>sediment basins to allow sediment to settle out | Prior to and during<br>site establishment<br>activities. |
|   |        | <ul> <li>from dirty water prior to discharge to natural drainage. All outlets would be designed for the 100-year ARI storm event.</li> <li>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.</li> </ul>   |  |
|   | 6.3    | Construct the unpaved access roads (Main<br>Site Access Road and Light Vehicle Road) with a<br>crowned surface to shed water onto surrounding<br>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<br>the Main Site Access Road crosses Watercourse<br>A approximately 250m from the Main Site<br>Entrance in consultation with NSW Department<br>of Primary Industries – Fisheries and NSW<br>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   | L  | Timing   |
|---|----------|--|--|
| 6 SURFACE WATER   | R (Cont' | d)   |  |
| Capture of sediment-laden<br>water flows from project<br>related disturbance.<br>(Cont'd) | 6.8      | Inspect all surface water control structures at least<br>quarterly and following any rainfall event of more<br>than 25mm in 24-hours to ensure their adequacy<br>and identify where remedial action is required.   | Prior to and during<br>establishment<br>activities.        |
| Manage potential pollutant<br>discharges.   | 6.9      | Ensure processing/tailings water would be<br>contained within a closed loop and re-used within<br>the Processing Plant, and pump tailings to the<br>Tailings Storage Facility following destruction of<br>weak acid dissociable cyanide concentration to <10<br>ppm.         | Ongoing throughout<br>the life of Project.                 |
|   | 6.10     | Design and construct the Tailings Storage Facility<br>to prevent leakage of leachate into the<br>groundwater.  | During mine design<br>and prior to<br>construction stages. |
|   | 6.11     | Construct a clean water diversion upstream of the<br>Tailings Storage Facility to completely divert any<br>upslope run-on. This bund would be stabilised to<br>effectively convey the 100-year ARI, time-of-<br>concentration flow from the upstream catchment.              | Prior to and during<br>site establishment<br>activities.   |
|   | 6.12     | Construct a seepage collection drain and pond<br>downslope of the Tailings Storage Facility to collect<br>potentially contaminated leachate from the Tailings<br>Storage Facility, if any, and pump it back to the<br>Tailings Storage Facility.                             |  |
|   | 6.13     | Ensure that all fuel and chemical storage,<br>delivery and handling areas are bunded to<br>110% of the size of the largest receptacle.   | Ongoing throughout<br>the life of Project.                 |
|   | 6.14     | Ensure that pumps and fluid lines for the delivery of<br>chemicals or fuels would be bunded and/or<br>protected. Transfer volumes would be monitored at<br>all times to quickly identify any leaks and<br>appropriate action to be undertaken.                               |  |
|   | 6.15     | Ensure that stormwater trapped in the Settling<br>Ponds and Sediment Basins is pumped back to the<br>Raw Water Dam for reuse in ore<br>processing, or treat with flocculants, if required, to<br>achieve total suspended solids<br>concentration of 50mg/L prior to release. |  |

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

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

| Desired Outcome  | Action | n  | Timing   |
|--|--------|--|--|
| 8 ABORIGINAL HE  | RITAG  | E  |  |
| Site activities are<br>undertaken without<br>impacting upon any<br>Aboriginal heritage items.                    | 8.1    | Undertake further site inspections of those sections<br>of the Mine Camp and Tailings Storage Facility<br>that were not surveyed during the 2010 OzArk<br>assessment prior to disturbing the ground to<br>confirm the assessment that there are no objects or<br>sites of Aboriginal<br>heritage significance within the proposed areas of<br>disturbance.   | Prior to the<br>commencement of<br>site establishment<br>operations. |
|  | 8.2    | Cease all work in the vicinity of an Aboriginal<br>sites or objects found during ground-clearing<br>construction works, and seek advice from OEH,<br>the National Parks and Wildlife Service and<br>Condobolin and Cobar Local Aboriginal Land<br>Councils will be sought on how to best proceed.<br>Work would not recommence in the area of the<br>find, until the officials contacted have inspected<br>the material and permission has been given to<br>continue with the construction works.  | As required.   |
|  | 8.3    | <ul> <li>Implement the following procedures, if during the life of the Project suspected human remains are identified within the Project Site.</li> <li>Step 1 the suspected skeletal remains would not be touched or disturbed.</li> <li>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.</li> <li>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.</li> </ul> |  |
| 9 HISTORICAL HEI   | RITAGE | E  | L  |
| Site activities are<br>undertaken without<br>impacting upon any<br>significant non-Aboriginal<br>heritage items. | 9.1    | Ensure trees identified to possess toe-holds and<br>bark-rings located east of the project Site (listed in<br>Table 4of OzArk 2011b) are not removed.  | Ongoing throughout<br>the life of Project.                           |

| Desired Outcome                                 | Action        | 1  | Timing                                  |
|---|---------------|--|---|
| 10 AIR QUALITY AN                               | <b>D</b> ENEI | RGY  | •<br>                                   |
| Minimise impacts to air quality relating to the | 10.1          | Limit disturbance to the minimum area necessary for mining and associated activities.  | Ongoing throughout the life of Project. |
| Project.  | 10.2          | Spray unsealed access roads and other trafficked areas with water carts at a rate of 2L/m <sup>2</sup> /hour, as required, when visible dust is generated.   |   |
|   | 10.3          | Incorporate water spray facilities at all transfer<br>points in the crushing and screening circuit within<br>the Processing Plant.   |   |
|   | 10.4          | Maintain ore handling areas / stockpiles in a moist<br>condition by using water carts to water down areas<br>affected by wind-blown and traffic- generated dust.   |   |
|   | 10.5          | Install suitable dust control measures within<br>the crushing and dry screening components of the<br>Processing Plant, including water sprays, to ensure<br>that the required level of dust suppression is<br>achieved. Alternatively,<br>enclose these components, with venting to a fabric<br>filter or equivalent device for removal of<br>particulate matter from the airstream prior to<br>release. |   |
|   | 10.6          | Maintain approximately 75% of the Tailings<br>Storage Facility area as wet, with emissions<br>restricted to 25% of the surface area of the<br>Tailings Storage Facility.   |   |
|   | 10.7          | Cap or otherwise treat the Tailings Storage Facility<br>during rehabilitation activities following<br>completion of operations.  |   |
|   | 10.8          | Maintain and inspect dust control systems, in accordance with supplier recommendations.  |   |
|   | 10.9          | Ensure site personnel understand fundamentals of<br>air emissions, and have been trained to make<br>timely reporting of any visible air emissions to<br>allow for prompt and appropriate action to be<br>undertaken for the management of the identified<br>emissions.   |   |

| Desired Outcome   | Action | 1   | Timing                                     |
|---|--------|---|--|
| 10 AIR QUALITY AN   | D ENE  | RGY (Cont'd)  |  |
| Minimise impacts to air<br>quality relating to the<br>Project. (Cont'd) | 10.10  | Install an onsite real-time meteorological<br>monitoring program in accordance with the<br>recommendations of the OEH's <i>Approved</i><br><i>Methods for the Sampling and Analysis of Air</i><br><i>Pollutants in New South Wales</i> (DEC, 2007). | Ongoing throughout<br>the life of Project. |
|   | 10.11  | Use biodegradable dust suppressants with<br>insignificant environmental impacts for controlling<br>dust emissions from unsealed roads and disturbed<br>areas.   |  |
|   | 10.12  | Minimise drop-heights from the ROM bin to the primary crusher.  |  |
|   | 10.13  | Establish vegetative cover, using endemic native<br>grass species, over all long term topsoil stockpiles<br>not regularly used.   |  |
|   | 10.14  | Profile all surfaces to reduce velocity of overland winds.  |  |
|   | 10.15  | Contour the final landform shape to avoid<br>strong wind flows and smooth gradients to<br>reduce turbulence at surface.   |  |
|   | 10.16  | Apply vegetative cover using endemic native<br>grass species, to non-operational<br>exposed surfaces, e.g. Tailings Storage<br>Facility wall, ROM pad batters, as soon as<br>practical after disturbance.   |  |
|   | 10.17  | Reshape, topsoil and rehabilitate completed Waste<br>Rock Emplacement areas as soon as practicable<br>after they are no longer required for mining-related<br>purposes.   |  |
|   | 10.18  | Progressively optimise the underground mine<br>design to minimise travel distances for mining<br>equipment and re-handling of waste and ore<br>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:<br>minimise the amount of conveyor operating<br>hours with zero load;   |  |
|   |        | maximise the use of gravity to move<br>material through the Processing Plant<br>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<br>technologies and hot water and air conditioning<br>systems wherever practical.  |  |

| Desired Outcome   | Action | 1  | Timing   |
|---|--------|--|--|
| 10 AIR QUALITY ANI  | ) ENEI | RGY (Cont'd)   |  |
| Minimise impacts to air<br>quality relating to the<br>Project. (Cont'd) | 10.22  | Maximise the recovery of recyclable materials<br>where practicable, including:<br>waste hydrocarbons;<br>polyethylene; and<br>scrap metals.  | Ongoing throughout<br>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<br>efficiency measures throughout the life of the<br>Project.  |  |
|   | 10.25  | <ul> <li>Prepare an Air Quality Monitoring Program in consultation with OEH and the surrounding community, including:</li> <li>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.</li> </ul> | Prior to the<br>commencement of<br>site establishment<br>operations. |
|   | 10.26  | Install an onsite real-time meteorological monitoring<br>program in accordance with the recommendations of<br>OEH's Approved Methods for the Sampling and<br>Analysis of Air Pollutants in New South Wales<br>(DEC, 2007).   |  |
| 11 TRAFFIC  |        |  |  |
| Achieve safe and efficient transport operations.                        | 11.1   | Construct the Main Site Entrance intersection on<br>Burthong Road and upgrade of the existing site<br>access intersection to a Basic left turn (BAL) rural<br>intersection treatment in accordance with RTA's<br>Austroads guidelines<br>to cater for 36m road trains and light<br>vehicle/light rigid trucks respectively.  | During site<br>establishment<br>operations.                          |
|   | 11.2   | Regularly inspect and clear long grass and bushes<br>that grow on the road shoulder to maintain the<br>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)  | Т              |   |  |
| Achieve safe and efficient<br>transport operations.<br>(Cont'd)          | 11.4<br>40km/h | Restrict vehicle speed within the Hera Mine to r.   | Ongoing throughout the life of Project.  |
| (Cont d)   | 11.5           | Ensure that all vehicles transporting bulk<br>concentrate are loaded using a front-end loader<br>fitted with a bucket load indicator to avoid<br>overloading.   |  |
|  | 11.6           | Ensure product is transported from the Project<br>Site during daylight hours  |  |
|  | 11.7           | Prepare, implement and enforce a Driver's Code<br>of Conduct for all heavy vehicle drivers accessing<br>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<br>to document relevant procedures to be<br>implemented during the intersection construction<br>works and throughout the life of the Project.   |  |
| Ensure adequate<br>maintenance of local roads. –<br>Cobar Shire Council. | 11.10          | Negotiate an appropriate arrangement with<br>Cobar Shire Council for the transportation of<br>concentrate on Berthong and Priory Tank Roads<br>at an indicative rate of \$1.82/t  | Prior to the<br>commencement of<br>concentrate<br>transportation.  |
|  | 11.11          | <ul> <li>Upgrade of the intersection Hartwood Street and<br/>Milford Street on Priory Tank Road, Nymagee</li> <li>Undertake road surface upgrades if<br/>deterioration of roads is occurring as a result of<br/>mining activities, using the Visual Road<br/>Pavement Condition Assessment, Hera Mine to<br/>Hermidale Siding, by Geolyse 2014 as an initial<br/>road condition report.</li> <li>Install traffic control devices in accordance<br/>with the Review of Traffic Control Devices,<br/>Hera Mine to Hermidale Siding, by Geolyse,<br/>May 2014</li> </ul>   | Prior to the<br>commencement of<br>concentrate<br>transportation unless<br>agreed otherwise with<br>the Cobar Shire<br>Council, and during<br>operations     |
| Ensure adequate<br>maintenance of local roads. –<br>Bogan Shire Council  | 11.12          | <ul> <li>Undertake road surface upgrades if deterioration<br/>of roads is occurring as a result of mining<br/>activities, using the Visual Road Pavement<br/>Condition Assessment, Hera Mine to Hermidale<br/>Siding, by Geolyse 2014 as an initial road<br/>condition report.</li> <li>Install traffic control devices in accordance<br/>with the Review of Traffic Control Devices,<br/>Hera Mine to Hermidale Siding, by Geolyse,<br/>May 2014</li> <li>Undertake a review of the unsealed section of<br/>the Nymagee –Hermidale road every two<br/>months, with the Shire, and undertake grading of<br/>the road if deemed necessary</li> <li>Contribute \$20,000 annualy to the re-sheeting<br/>program of the unsealed section of the<br/>Nymagee-Hermidale Road</li> </ul> | Prior to the<br>commencement of<br>concentrate<br>transportation,<br>unless agreed<br>otherwise with the<br>Bogan Shire<br>Council, and during<br>operations |

| Desired Outcome  | Action   |  | Timing   |
|--|----------|--|--|
| <b>TRAFFIC</b> (Cont'd)  | <u> </u> |  | I  |
|  |          | -Hera Resources will restrict concentrate<br>haulage during times of rainfall to prevent<br>deterioration of the unsealed section of road  |  |
| Ensure roads and tracks do<br>not adversely impact on fish<br>passage within the Project Site. |          | <ul> <li>Ensure that all roads and tracks across waterways are designed and constructed.</li> <li>in consultation with Department of Primary Industries – Fisheries and in accordance with the documents "Policy and Guidelines for Fish Friendly Waterway Crossings (2004)" and "Why do Fish Need to Cross the Road? - fish passage requirements for waterway crossings"; and</li> <li>in consultation with NSW Office of Water and in accordance with the Office of Guidelines for Controlled Activities.</li> </ul> | Prior to and during<br>site establishment<br>operations. |
| 12 SOILS AND LAND (  |          |  |  |
| Maintenance of soil value<br>for rehabilitation and<br>minimisation of soil loss               | 12.1     | Minimise handling of all soils to minimise their<br>structural damage by ensuring the areas for<br>stripping and stockpiling are clearly identified.   | During site<br>establishment<br>operations.              |
| through erosion.   | 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<br>and other areas of the Project Site to a depth of<br>300mm and store in stockpiles no more than 2m<br>high.   |  |

| Desired Outcome   | Action  | I   | Timing                                     |
|---|---------|---|--|
| 12 SOILS AND LANI   | ) CAPAI | BILITY (Cont'd)   |  |
| Maintenance of soil value<br>for rehabilitation and<br>minimisation of soil loss<br>through erosion. (Cont'd) | 12.4    | Strip subsoil in relevant areas to bedrock and store<br>in stockpiles no more than 3m in high.  | During site<br>establishment               |
|   | 12.5    | Refrain from stripping or placing soils during wet conditions.  | operations.                                |
|   | 12.6    | Ensure that machinery used for stripping operations<br>would dump their loads neatly and uniformly so<br>that the stockpile does not require further forming<br>prior to establishment of vegetation cover.   | Ongoing throughout<br>the life of Project. |
|   | 12.7    | Avoid driving of machinery on the topsoil and<br>subsoil stockpiles once the stockpiles are created<br>to minimise compaction and further degradation<br>of soil structure.   |  |
|   | 12.8    | Construct upslope water diversion banks to direct<br>overland surface water flow away from the soil<br>stockpiles.  |  |
|   | 12.9    | Implement downslope sedimentation controls as<br>required, until the surface of the soil stockpiles are<br>appropriately stabilised using groundcover<br>species.   | Ongoing throughout<br>the life of Project. |
|   | 12.10   | Ensure the formed soil stockpile surfaces would<br>have a generally uneven surface that is as 'rough' as<br>possible, in a micro-sense, to assist in surface<br>water runoff control and seed retention and<br>germination.   |  |
|   | 12.11   | Sow soil stockpiles with stabilising groundcover,<br>comprising endemic native species as soon as<br>possible after placement and water, if necessary,<br>to speed up establishment and attain a cover of at<br>least<br>30% to minimise erosion and sedimentation. |  |
|   | 12.12   | Ensure slopes less than 2% are rehabilitated with<br>Red Earths with due regard to the following<br>precautionary measures:   |  |
|   |         | no furrowing would be used;<br>maintain the length of exposed slopes to less<br>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 | 1   | Timing                                     |  |  |  |
|---|--------|---|--|--|--|--|
| 12 SOILS AND LAND CAPABILITY (Cont'd)   |        |   |  |  |  |  |
| Maintenance of soil value<br>for rehabilitation and<br>minimisation of soil loss<br>through erosion. (Cont'd) | 12.15  | Ensure that during soil placement operations soil<br>is placed directly onto a scarified surface without<br>compaction and in correct order, namely topsoil<br>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 AMENIT  | Y      |   |  |  |  |  |
| Limit the visibility of<br>operational areas from<br>nearby residences.                                       | 13.1   | Construct the Processing Plant and other on- site<br>infrastructure from non-reflective, neutral<br>coloured material, where possible.  | Ongoing throughout<br>the life of Project. |  |  |  |
|   | 13.2   | Progressively rehabilitate disturbed sections of the<br>Project Site no longer required for the Project, and<br>re-vegetate areas that are bare or only have remnant<br>vegetation. |  |  |  |  |
|   | 13.3   | Undertake active dust management measures to<br>reduce the potential for the creation of a<br>'dust cloud', especially during site<br>establishment activities.                     |  |  |  |  |
|   | 13.4   | Manage waste within the Project Site in an<br>appropriate manner such that the site will not<br>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   | •<br>  |   |  |  |  |  |
| Avoidance of any fires on site, particularly in native vegetation.  | 14.1   | Ensure that refuelling is undertaken within<br>designated fuel bays or within cleared areas of the<br>Project Site.   | Ongoing throughout<br>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 | 1  | Timing  |  |  |
|---|--------|--|---|--|--|
| 14 BUSHFIRE (Cont'd)  |        |  |   |  |  |
| Avoidance of any fires on<br>site, particularly in native<br>vegetation. (Cont'd) | 14.4   | Ensure clearing during high or extreme bushfire<br>hazard conditions (as defined by the NSW Rural<br>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<br>Council and Office of Environment and Heritage<br>(NPWS) to determine when back- burning or fire<br>control activities are planned.   |   |  |  |
|   | 14.9   | Ensure access to on-site water storages for the NSW<br>Rural Fire Services is available in the event of a fire<br>within or surrounding the<br>Project.  |   |  |  |
|   | MICA   | L & WASTE MANAGEMENT   |   |  |  |
| Implement adequate<br>controls for the management<br>of hazardous chemicals.      | 15.1   | Manage the Project Site in accordance with<br>NICNAS Category 1 of <i>Priority Existing Chemical</i><br><i>Assessment Report No 31 – Sodium Cyanide</i><br>(Commonwealth Department of<br>Health and Ageing) to ensure that adequate<br>controls exist to reduce weak acid dissociable<br>cyanide concentration to <10 ppm prior to<br>discharge to the Tailings Storage Facility. | Prior to, during and<br>following the life of<br>the Project. |  |  |
|   | 15.2   | Store and manage all chemicals in accordance with<br>the <i>Hydrocarbon and Chemical Management Plan</i><br>prepared for the site, and the <i>Material Safety Data</i><br><i>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 AS/NZS 4452- The Storage and Handling of Toxic Substances.   |   |  |  |
|   | 15.4   | Ensure that dangerous goods are transported<br>in accordance with the requirements of the<br>"Australian Code for the Transport of<br>Dangerous Goods by Road and Rail- Current<br>Edition."   |   |  |  |
|   | 15.5   | Train employees using hazardous chemicals in their proper handling and spill management techniques.  |   |  |  |
|   | 15.6   | Dispose of excess chemicals and reagents no<br>longer required for the Project properly using<br>qualified personnel for their removal and transfer<br>to appropriate licensed facility for destruction or<br>reuse.   |   |  |  |

| Desired Outcome  | Action  | Timing  |  |  |  |
|--|---|---|--|--|--|
| 15 HAZARDOUS CHEMICAL & WASTE MANAGEMENT (Cont'd)  |   |   |  |  |  |
| Manage waste using the<br>hierarchy minimise waste<br>production, reuse and<br>recycle materials, and<br>dispose of waste not able to<br>be recycled.  | 15.7 Manage non-production waste in accordance with<br>the objects of the <i>Waste Avoidance and Resource</i><br><i>Recovery Act 2000</i> and operate the Project against<br>the hierarchy of avoidance of unnecessary<br>resource consumption, resource recovery<br>(including reuse, reprocessing, recycling and<br>energy recovery where practical), and disposal of<br>materials only after no uses have been identified<br>for them. | Prior to, during and<br>following the life of<br>the Project.     |  |  |  |
|  | 15.8 Encourage the most efficient use of resources, aim<br>for a continual reduction in waste generation, and<br>thus reduce environmental harm in accordance with<br>the principles of ecologically sustainable<br>development.  |   |  |  |  |
| Ensure that contaminated<br>land is appropriately<br>identified and managed  | 15.9 Ensure that a contaminated land assessment is<br>undertaken prior to the commencement of<br>decommissioning operations and that any<br>contaminated land is managed in accordance with<br>the relevant guidelines applicable at the time.  | Prior to the<br>commencement of<br>decommissioning<br>operations. |  |  |  |
| 16 SOCIO ECONOMIO  |   |   |  |  |  |
| Maximise the positive<br>impacts and minimise any<br>actual or perceived adverse<br>impacts on the social fabric or<br>facilities available to the<br>community surrounding the<br>Project Site. | <ul> <li>Social and Community</li> <li>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.</li> </ul>  | Prior to, during and<br>following the life of<br>the Project.     |  |  |  |
|  |   | Prior to, during and<br>following the life of<br>the Project.     |  |  |  |
|  | 16.3 Form and maintain a Community Consultative<br>Committee (CCC) and which would include<br>representative members of the surrounding<br>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 ECONOMIO   | C (Cont'd)  |   |
| Maximise the positive<br>impacts and minimise any<br>actual or perceived adverse<br>impacts on the social fabric or<br>facilities available to the<br>community surrounding the | 16.5 Instigate and maintain a community complaints telephone line, and ensure this mechanism of complaints receival by the Proponent is advertised widely using flyers and verbal announcements at community consultation meetings.   | Prior to, during and<br>following the life of<br>the Project. |
| Project Site. (Cont'd)  | <ul> <li>16.6 Negotiate with Council and the surrounding<br/>Nymagee community to support (either financially<br/>of in-kind) one or more community projects in<br/>accordance with the documents entitled Cobar<br/>Shire Council Social Plan 2011-<br/>2016 and the Cobar Shire Community<br/>Strategic Plan (in preparation).</li> </ul> |   |
|   | Employment and Training   |   |
|   | 16.7 Give preference when engaging new employees,<br>where practicable, to candidates from the<br>surrounding community over candidates with<br>equivalent experience and qualifications from<br>elsewhere and ensure that the mining and other<br>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-<br>based employees and contractors in training or<br>education programs to impart the appropriate<br>skillsets and qualifications in them for the<br>continued development of the economic growth<br>within the surrounding communities following<br>Project completion.               |   |
|   | Economic Contribution and Development   |   |
|   | 16.10 Give preference, where practicable and cost-<br>competitive, to suppliers of equipment, services<br>or consumables located within the surrounding<br>community.   |   |
|   | 16.11 Assist community members and others, as<br>appropriate, to establish complementary<br>businesses where those businesses would<br>provide a benefit to the community through<br>increased economic development.  |   |
|   | 16.12 Assist Cobar Shire Council to promote and<br>encourage economic development that would<br>continue beyond the Project life.   |   |

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

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