

**SCHEDULE 2**

Red Type represents August 2003 Modification (Mod 1)  
 Green Type Represents December 2003 Modification (Mod 2)  
 Blue Type Represents August 2004 Modification (Mod 3)  
 Lavender Type Represents August 2006 Modification (Mod 4)  
 Brown Type Represents February 2008 Modification (Mod 5)  
 Grey Type Represents February 2009 Modification (Mod 7)  
 Purple Type Represents August 2009 Modification (Mod 8)  
 Orange Type Represents March 2010 Modification (Mod 6)

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**DEFINITIONS:**

**AEMR** - Annual Environmental Management Report

**CEMCC** - Community Environmental Monitoring and Consultative Committee

**DA** - Development Application

**DA area** - Development Application area which includes the Mine site and water pipeline route as shown on Figure ES-2 of the EIS

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

**Department** - Department of Planning

**Director-General** - Director-General of Planning, or delegate

**EA** – documentation titled “Cowal Gold Mine E42 Modification Environmental Assessment” dated August 2008 and the Applicant’s response to submissions dated November 2008, as modified by documentation titled “Cowal Gold Mine E42 Modification Modified Request” dated October 2009

**EIS** - Environmental Impact Statement

**Evening** – The period from 6pm to 10pm

**Mine site** - the area within the internal catchment drainage system as defined by the EIS

**Mining Operations** – Includes all ore extraction, processing and transportation activities carried out on site

**Night** – The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays

**Reasonable and Feasible** – 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. Feasible relates to engineering considerations and what is practical to build

### **Government Authorities**

**BSC** - *Bland Shire Council*

**DECCW** - Department of Environment, Climate Change and Water

**DII(Agriculture)** - Department of Industry and Investment (Agriculture)

**DII(Fisheries)** - Department of Industry and Investment (Fisheries)

**DII(Minerals)** - Department of Industry and Investment (Minerals)

**DSC** - *NSW Dams Safety Committee*

**OoW** - *Office of Water*

**RAC** - *Rail Access Corporation*

**RTA** - *Roads and Traffic Authority*

## 1. GENERAL

### 1.1 Adherence to terms of DA, EIS, SIS, etc.

- (a) The Development is to be carried out generally in accordance with the:
- (i) EIS dated 13 March 1998, including the Statement of Intent by North Gold (WA) Ltd, and prepared by Resource Strategies, as amended by the plans in Appendix 2 of this consent;
  - (ii) other relevant documentation, including the Applicant's primary submission, and submission in reply to the Commission of Inquiry;
  - (iii) modification application submitted by Barrick Australia Limited, dated 20 June 2003;
  - (iv) modification application and supporting information submitted by Barrick Australia Limited, dated 13 November 2003;
  - (v) modification application and supporting information submitted by Barrick Australia Limited, dated 22 June 2004;
  - (vi) modification application and supporting documentation submitted by Barrick Australia Limited, dated 15 August 2006;
  - (vii) modification application and supporting documentation submitted by Barrick Australia Limited, dated 24 December 2007;
  - (viii) modification application and supporting documentation submitted by Barrick Australia Limited, dated 30 January 2009;
  - (ix) modification application and supporting documentation submitted by Barrick (Cowal) Limited, dated 23 June 2009;
  - (x) modification application dated 25 March 2008 and supporting EA submitted by Barrick Australia Limited; and
  - (xi) conditions of this consent.
- (b) If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this consent shall prevail over all such documents to the extent of any inconsistency.

### 1.2 Period of Approval/Project Commencement

- (i) Mining operations may take place until 30 June 2024.

*Note: Under this approval, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Director-General and DII(Minerals). Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been properly rehabilitated.*

- (ii) At least one month prior to the commencement of construction, or within such period as agreed by the Director-General, the Applicant shall submit for the approval of the Director-General a compliance report detailing compliance with all the relevant conditions that apply prior to the commencement of construction.
- (iii) At least one month prior to commissioning of the ore processing plant, or within such period as agreed by the Director-General, the Applicant shall submit for the approval of the Director-General a compliance report detailing compliance with all the relevant conditions that apply prior to the commissioning of the ore processing plant.
- (iv) Date of commencement of construction works and date of commissioning of the ore processing plant are to be notified in writing to the Director-General and BSC, at least two weeks prior to commencement of construction works and commissioning of the ore processing plant

respectively.

- (v) No mine construction activity is to occur until the relevant approvals under the Environmental Planning and Assessment Act 1979 have been obtained for the construction of the transmission line from Temora to the mine site and the mine access road upgrade. This condition does not require approval to be obtained under the Environmental Planning and Assessment Act 1979 in relation to any rail crossing before mine construction activities can commence.
- (vi) If construction works have not commenced within two years of this development consent, the Applicant shall provide an annual report on the status of the project and any major changes to the environmental conditions of the site. If required, the first report shall be provided to the Director-General on the second anniversary of the granting of this consent.

### **1.3 Dispute Resolution**

In the event that the Applicant and the BSC or a Government agency, other than the Department, cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or if not resolved, to the Minister for Planning, whose determination of the disagreement shall be final and binding on the parties.

### **1.4 Security Deposits and Bonds**

Security deposits and bonds will be paid as required by DII(Minerals) under mining lease approval conditions.

## **2. MINE MANAGEMENT**

### **2.1 Mine Management Plan, Operations and Methods**

The Applicant shall submit to and have accepted by the DII(Minerals), a Mining Operations Plan in accordance with current guidelines issued by DII(Minerals), prior to commencement of mining. The Plan covers mining operations for a period of up to seven years. Changes in mining operations must be reflected in a revised Plan, which must be approved by DII(Minerals) prior to commencing the changed operations.

The revised Plan addressing the changes in mining operations proposed in the modification application and supporting documentation submitted by Barrick Australia Limited, dated 30 January 2009, must include a geotechnical analysis and review of ongoing open pit development, the management of waste rock emplacements, and continued monitoring of the lake protection bund.

### **2.2 Ore, Waste and Concentrate Production**

The Applicant shall not transport ore or other excavated materials not required for either construction or maintenance works from other mines or locations to the mine site without the written approval of the relevant councils.

### **2.3 Mine and Public safety**

The Applicant shall secure the mine site as described in section 2.10.5 of the EIS. The fence for the MLA boundary shall be designed to minimise the impact on water birds and aquatic species.

(Refer also to condition 5.4(b)(ii)).

## **3. LAND AND SITE ENVIRONMENTAL MANAGEMENT**

### **3.1 Appointment of Environmental Officer**

- (i) The Applicant shall employ an Environmental Officer to exclusively work for the Cowal gold mine and no other mine, whose qualifications are acceptable to the DII(Minerals) who shall report to the Mine Manager. The Officer shall be employed throughout the life of the mine, and shall:
  - (a) be responsible for the preparation of the environmental management plans (refer

condition 3.2)

- (b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;
  - (c) be responsible for receiving and responding to complaints in accordance with condition 10.2(a);
  - (d) facilitate an induction and training program for all persons involved with construction activities, mining and remedial activities; and
  - (e) have the authority and independence to require reasonable steps to be taken to avoid or minimise significant environmental impacts which are not in accordance with this consent or the EIS and failing the effectiveness of such steps, to cease the activity causing the problem immediately if a significant impact on the environment is likely to occur.
- (ii) The Applicant shall notify the Director-General, [DII\(Minerals\)](#), [DECCW](#), [OoW](#), BSC and the CEMCC (refer condition 8.7) of the name and contact details of the Environmental Officer upon appointment and any changes to that appointment.

### **3.2 Environmental Management Plans**

The Applicant shall prepare the following environmental management plans:

- Archaeology and cultural management plan (refer condition 3.3)
- Fauna management plan (refer condition 3.4)
- Erosion and sediment control plan (refer condition 3.5(a))
- Soil stripping management plan (refer condition 3.5(b))
- [Rehabilitation and Offset management plan \(refer condition 3.6\(d\)\)](#)
- [Bushfire management plan \(refer condition 3.8\)](#)
- [Land management plan \(refer condition 3.10\)](#)
- Compensatory wetland management plan (refer condition 3.11(v))
- Site water management plan (refer condition 4.1)
- Cyanide management plan (refer condition 5.3(b))
- Hazardous waste and chemical management plan ([refer condition 5.7](#))
- Dust management plan (refer condition 6.1)
- Blast management plan (refer condition 6.3)
- [Noise management plan \(refer condition 6.4\(g\)\)](#)

The management plans are to be revised/updated at least every five years, or as otherwise directed by the Director-General, in consultation with the relevant government authorities. They will reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial environmental management plan. The plans shall also be made publicly available at BSC within two weeks of approval of the relevant government authority.

### **3.3 Heritage Assessment and Management**

- (a) The Applicant shall prior to commencement of construction works:
  - (i) [prepare a Heritage Management Plan \(HMP\) to address non-indigenous cultural heritage issues. The HMP shall be prepared in consultation with Bland District Historical Society, BSC, and Lake landholders/residents, and to the satisfaction of the Director-General;](#)
  - (ii) [prepare an Indigenous Archaeology and Cultural Management Plan \(IACMP\) to identify future salvage, excavation and monitoring of any archaeological sites within the DA area prior to and during development, and to address Aboriginal cultural heritage issues. The IACMP shall be prepared in consultation with NPWS, the Local Aboriginal Land Council, a consultant archaeologist, any other stakeholders identified by NPWS, and to the satisfaction of the Director-General; and](#)
  - (iii) [retain a Cultural Heritage Officer approved by the West Wyalong Local Aboriginal Land Council who is to be available on site during construction earthworks.](#)
- (b) [The Applicant shall, prior to the commencement of construction works in a particular part of the DA area, submit to and have approved by the Director-General of NPWS, a Consent to Destroy application under Section 90 of the National Parks and Wildlife Act 1974 in relation to that particular part of the DA area for Aboriginal archaeological sites that have been identified to be](#)

damaged or destroyed as a result of the development prior to consent and/or by the IACMP.

### **3.4 Flora and Fauna Assessment and Management**

- (a) The Applicant shall prior to commencement of construction prepare a fauna management plan to cover the mining lease area and monitoring of bird breeding areas as identified by the Applicant in consultation with DECCW. The plan shall be prepared in consultation with DII(Fisheries) and DECCW, and be to the satisfaction of the Director-General. The plan shall include, but not be limited to:
- (i) methods for monitoring daily and seasonal fauna usage of tailings dams (eg. species, number, location, habits), and whether deaths or other effects or incidents are occurring. Usage of the tailings dams shall be reported to the DECCW on a six monthly basis, unless otherwise directed by the Director-General;
  - (ii) development of a protocol for the reporting of any native fauna deaths or other incidents involving native fauna on the mining lease to the DECCW, DII(Minerals), CEMCC and in the case of fish, DII(Fisheries). Native fauna deaths (except those attributable to physical trauma such as vehicle strike) must be reported as per this protocol within 24 hours (or next working day). The Applicant shall maintain a record of any native fauna deaths or other incidents and this record shall be included in the AEMR;
  - (iii) provision for fauna autopsy facilities to enable the cause of any deaths to be quickly determined. The protocol required in sub clause (ii) above shall also detail collection and autopsy of fauna. This shall include but not be limited to collection and recording procedures, autopsy procedures and laboratory tests.
  - (iv) provision of contingency measures for reducing cyanide levels in the tailings dams in the event it is established that fauna deaths are occurring from cyanide in tailings dam water (refer also condition 5.3(c));
  - (v) development of effective mechanisms to keep fauna and avifauna away from the tailings storages, which shall include, but not be limited to:
    - minimising the area of open water in the tailings dams;
    - fencing to prevent both medium and large fauna, terrestrial and amphibians, from entering the area. Mesh will have holes no greater than 5cm in diameter;
    - making the area non conducive to the establishment of wildlife habitats, as far as possible;
    - use of netting where practical; and
    - use of current best practice methods for avifauna deterrence;
  - (vi) development of plans for the rescue and rehabilitation of wildlife that may become bogged/sick/trapped in the tailings dams or elsewhere within the mining lease area;
  - (vii) methods to conserve and enhance wildlife values around Lake Cowal, within the mine lease area, including: protection and enhancement of existing retained habitats;
  - (viii) provision to continue fauna and flora, fish, and aquatic invertebrate monitoring of the Lake Cowal region as documented in the EIS and SIS including investigation of fauna deaths off the Mine Site if requested by the Director-General where it is considered the deaths are attributable to activities on the Mine Site;
  - (ix) details to relocate any threatened species and/or its habitat away from disturbed areas that are created by mine operations. This will include placement and maintenance of suitable types and numbers of artificial roosting boxes for bats such as the Greater Long-eared Bat and other animals (eg birds/possums) in undisturbed areas of the mine site;
  - (x) details of monitoring the mine's impacts particularly on birdlife in bird breeding areas identified by the Applicant in consultation with DECCW, threatened fauna and flora, and fish and aquatic invertebrates around Lake Cowal, and outline contingency measures should impacts be identified as occurring.
- (b) The Applicant shall also implement a Threatened Species Management Protocol as outlined in Appendix 9 of the Department's primary submission to the Commission of Inquiry, which will include provisions for targeted searches prior to construction and proposed mitigation measures where threatened flora or fauna species are found.

### 3.5 Prevention of Soil Erosion

The Applicant shall prepare prior to commencement of construction works, in consultation with DECCW and to the satisfaction of the Director-General :

- (a) an erosion and sediment control management plan for the DA area which meets the requirements of DECCW. The plan shall include, but not be limited to:
  - (i) details of temporary and permanent sediment and erosion control systems to be used during both mine construction and operation, including for earthworks associated with landscaping;
  - (ii) details of salinity management; and
  - (iii) a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved erosion and sediment control management plan, and EIS;
- (b) a soil stripping management plan for the DA area to the requirements of DII(Minerals) and DECCW which shall include, but not be limited to:
  - (i) details of the management of soil stockpiles, soil stripping techniques and scheduling; and
  - (ii) a program for reporting on the effectiveness of the soil stripping methods and performance against objectives contained in the soil stripping management plan, and EIS.

### 3.6 Rehabilitation and Offset Management

#### Rehabilitation and Offsets

- (a) The Applicant shall:
  - (i) progressively rehabilitate the mine site in a manner that is generally consistent with the final landform in the EA (as shown in Appendix 1);
  - (ii) maximise the salvage and beneficial use of resources in areas subject to disturbance; and
  - (iii) implement the biodiversity offset strategy as described in the EA, and summarised in Table 1 (and shown conceptually in Appendix 2), to the satisfaction of the Director-General and DII(Minerals).

Table 1: Offset Strategy

Area	Minimum Size
Offset – Enhancement Area	110 ha
Offset – Revegetation Area	100 ha
<b>Total</b>	<b>210 ha</b>

- (b) By the end of December 2011, the Applicant shall make suitable arrangements to provide appropriate long term security for the offset areas to the satisfaction of the Director-General.
- (c) By the end of December 2010, the Applicant shall demonstrate that appropriate monetary bonds are, or will be, in place with applicable authorities to fully implement the offset strategy, to the satisfaction of the Director-General.

#### Rehabilitation and Offset Management Plan

- (d) The Applicant shall prepare and implement a Rehabilitation and Offset Management Plan for the project to the satisfaction of DII and the Director-General. This plan must be prepared in consultation with DECCW, OoW and BSC, and be submitted to the Director-General and DII(Minerals) for approval by the end of July 2010.

This plan must include:

- (i) the rehabilitation objectives for the mine site and offset areas;
- (ii) a description of the short, medium, and long term measures that would be implemented



- to:
- rehabilitate the mine site;
  - implement the offset strategy; and
  - manage the remnant vegetation and habitat on the mine site and in the offset areas;
- (iii) detailed performance and completion criteria for the mine site rehabilitation and implementation of the offset strategy;
- (iv) a detailed description of the measures that would be implemented, including the procedures to be implemented for:
- progressively rehabilitating disturbed areas;
  - implementing revegetation and regeneration within the disturbance areas and offset areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
  - protecting vegetation and soil outside the disturbance areas;
  - rehabilitating creeks and drainage lines on the site (both inside and outside the disturbance areas);
  - managing salinity;
  - conserving and reusing topsoil;
  - undertaking pre-clearance surveys;
  - managing impacts on terrestrial and aquatic fauna;
  - landscaping the mine site to minimise visual impacts;
  - collecting and propagating seed for rehabilitation works;
  - salvaging and reusing material from the mine site for habitat enhancement;
  - controlling weeds and feral pests, including terrestrial and aquatic species;
  - managing grazing and agriculture on site;
  - controlling access; and
  - bushfire management;
- (v) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
- (vi) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
- (vii) details of who would be responsible for monitoring, reviewing, and implementing the plan.

### **3.7 Deleted**

### **3.8 Bushfire and other Fire Controls**

The Applicant shall:

- (a) prior to commencement of construction works prepare and submit for the approval of BSC, a bushfire management plan as outlined in section 6.4.4 of the EIS; and
- (b) provide adequate fire protection works on-site. This shall include one (1) emergency fire fighting unit on site.

(Refer also condition 5.4(a)(i)).

### **3.9 Other Land Covenants and Agreements**

- (a) Relocation of Game Reserve

The Applicant shall prior to the commencement of construction works relocate the existing game reserve in consultation with BSC, DECCW, DII(Fisheries), and lake residents and users as identified by BSC. Where public access arrangements are to be provided they shall be completed no later than the time of the reserve's relocation, to the requirements of BSC and DECCW. The total size of the new reserve(s) shall be no smaller than the existing reserve.

- (b) Relocation of Travelling Stock Route



The Applicant shall, prior to the commencement of construction works on the Travelling Stock Route (TSR), relocate the TSR in accordance with the EIS and the requirements of BSC, and the Condobolin Rural Lands Protection Board, and should include appropriate fencing and stock watering facilities.

- (c) The Applicant is to ensure that all applications for road closures are finalised prior to the commencement of construction works on the land comprising the existing public roads which are to be closed. This will include the relocation of the public roads in use prior to commencement of construction works on the land comprising the existing public roads which are to be closed.

### **3.10 Land Management**

The Applicant shall:

- (A) (i) prior to commencement of construction works prepare a Land Management Plan for all its land holdings to provide for proper land management in consultation with DECCW, OoW, DII(Agriculture), and BSC, and to the satisfaction of the Director-General. The plan shall be consistent with the fauna management plan (condition 3.4) and shall include, but not be limited to:
- (a) pastures and remnant vegetation management;
  - (b) control of vermin and noxious weeds as required by the Rural Lands Protection Authority, the Prickly Pear Authority and other relevant authorities;
  - (c) integration of the latest versions of the Jemalong Land and Water Management Plan and the Lake Cowal Land and Water Management Plan; and
  - (d) feral animal control.
- (ii) prior to commencement of construction works prepare a Compensatory Wetland Management Plan. in consultation with DECCW, DII(Fisheries), Lake Cowal Landowners Association, and Lake Cowal Environmental Trust, and to the satisfaction of the Director-General. The plan shall detail compensation measures for the loss of 120 hectares of wetland, through the enhancement of at least the equivalent area of existing wetland within the mine lease area during operation and following closure of the mine. The plan shall include, but not be limited to:
- (a) a definition of wetland which shall be all land up to the high water mark of Lake Cowal recognising that river red gum habitat is below high water mark;
  - (b) measures to manage the enhanced wetlands without adversely impacting adjoining private properties; and
  - (c) measures to improve habitats for wildlife including waterbirds, fish, aquatic organisms etc, in the wetlands covered by the plan.
- (B) minimise the removal of trees and other vegetation from the mine site and restrict any clearance to the areas occupied by the mine activity, buildings and paved surfaces, and those areas necessary for fire control in accordance with BSC's requirements, and have regard to the draft Mid-Lachlan Regional Vegetation Management Plan (or its final version);
- (C) not locate topsoil stockpiles within any area of Wilga Woodland in the DA area as identified in figure 3-13 of the EIS;
- (D) not disturb any area of Belah Woodland in the DA area as identified in figure 3-13 of the EIS.
- (E) develop a strategy for the long term land use of the DA area on decommissioning of the mine site. The strategy shall include, but not be limited to: appropriate landuses within the DA area, which may include areas for conservation, agriculture or recreation, long term management of the area, environmental impacts of any uses and maintenance of necessary drainage characteristics and other features provided on the site. The strategy for long term land use of the DA area shall be submitted by Year 7 of mining operations or five years before mine closure, whichever is the sooner, in consultation with OoW, DECCW, BSC, CEMCC, and to the

satisfaction of the Director-General.

#### **4. WATER MANAGEMENT**

##### **4.1/4.2 Surface Water Management & Ground Water Management**

The Applicant shall:

- (a) prior to the commencement of construction works shall prepare a site water management plan in consultation with **OoW** and **DECCW**, and to the satisfaction of the Director-General, which shall include, but not be limited to, the following matters:
  - (i) management of the quality and quantity of surface and ground water within and around the mine site, including water in the up catchment diversion system, internal catchment drainage system, dewatering bores, Bland Creek Palaeochannel borefield and water supply pipeline from the borefield, which shall include preparation of monitoring programs as provided by condition 8.2.;
  - (ii) measures to prevent the quality of water in Lake Cowal or any surface waters being degraded below the relevant ANZECC water quality classification prior to construction due to the construction and/ or operation of the mine;
  - (iii) identification of any possible adverse effects on water supply sources of surrounding land holders, and land holders near the Bland Creek Palaeochannel Borefield as a result of the mining operations, and implementation of mitigation measures as necessary;
  - (iv) identification of changes in flood regime on productive agricultural land in Nerang Cowal as a result of the mine perimeter bund intruding into Lake Cowal, and provision of appropriate compensation measures for affected landholders based on inundation of productive land caused by the changed flood regime;
  - (v) construction and operation of water storages D1 and D4 as first flush systems with initial captured run-off waters from the outer batters of northern and southern emplacement dumps reporting to water storage D6;
  - (vi) measures to manage and dispose of water that may be captured behind the temporary perimeter bund during construction of that bund;
  - (vii) integration of the latest versions of the Jemalong Land and Water Management Plan and the Lake Cowal Land and Water Management Plan;
  - (viii) **measures to evaluate water quality data obtained from monitoring as required by condition 8.2(a)(iii) against records of baseline monitoring undertaken prior to development consent; and**
  - (ix) a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plan, and EIS.
- (b) develop a strategy for the decommissioning of water management structures, including water storages both in and around the mine site, the water pipeline from the Bland Creek Palaeochannel borefield (refer condition 4.4), and long term management of final void and Lake protection bund. The strategy shall include, but not be limited to, long term monitoring of the water quality in the final void and stability of Lake protection bund and void walls, and options for alternate uses of the water pipeline. The strategy for the final void shall be submitted by Year 7 of mining operations or five years before mine closure, whichever is the sooner, in consultation with **OoW**, **DECCW**, **DII(Minerals)**, and CEMCC, and to the satisfaction of the Director-General.
- (c)
  - (i) construct the Lake protection bund and site water and tailings storages to the requirements of **OoW**, **DECCW** and DSC;
  - (ii) provide a geotechnical report on pit/void wall construction/stability to **DII(Minerals)** prior to

commencement of mining operations and construct pit/void in accordance with the requirements of DII(Minerals);

#### **4.3 Catchment Areas and Watercourses**

The Applicant shall as a landowner have on-going regard for the provisions of the latest versions of the Jemalong Land and Water Management Plan, Lake Cowal Land and Water Management Plan, Mid-Lachlan Regional Vegetation Management Plan, and any future catchment/land and water management plans that may become relevant to the area.

#### **4.4 Water Supply**

##### Bland Creek Palaeochannel water supply

- (a) The maximum daily extraction of water from the Bland Creek Palaeochannel shall not exceed 15ML/day, and not exceed 3650ML/year. A total extraction of 30,000ML shall not be exceeded for the life of the mine, unless otherwise agreed by the Director-General, in consultation with OoW. All bores from the Bland Creek Palaeochannel borefield used for mine purposes must be metered.
- (b) The water pipeline from the Bland Creek Palaeochannel borefield to the mine site shall be:
  - (i) constructed in accordance with the requirements of OoW, and in consultation with DII(Fisheries); and
  - (ii) laid in such a way so as not to impede the passage of fish or other animals, or interfere with flood behaviour or the passage of boats and vehicles.
- (c) The water supply shall be installed with an automatic shut down device so water pumping is immediately stopped in the event of any pipe rupture. The water supply shall not be restarted until the rupture is located and repaired.
- (d) Leases or private agreements shall be completed with the relevant landholders for the land requirement for pipeline infrastructure prior to commencement of water pipeline construction. (Refer condition 4.1/4.2(vi) for strategy for pipeline decommissioning).

##### 4.4A Saline Groundwater Supply Borefield

- (a) The water pipelines from the saline groundwater supply borefield to the mine site shall be:
  - (i) constructed in accordance with the requirements of the OoW.
  - (ii) laid in such a way so as not to impede the passage of fish or other animals, or interfere with flood behaviour or the passage of boats and vehicles.
- (b) The water supply shall be installed with an automatic shut down device so water pumping is immediately stopped in the event of any pipe rupture. The water supply shall not be restarted until the rupture is located and repaired.

#### **4.5 Disposal of Excess Water**

There shall be no disposal of water from the internal catchment drainage system to Lake Cowal under any circumstances.

### **5. HAZARDOUS MATERIALS AND TAILINGS MANAGEMENT**

#### **5.1 Waste Rock Emplacement and Management**

The Applicant shall construct and manage the waste rock emplacement as set out in the documentation listed in condition 1.1(a), and to the satisfaction of DII(Minerals).

## 5.2 Tailings Emplacement and Management

The Applicant shall:

- (a) construct the tailings dams to the requirements of, **DII(Minerals)**, **DECCW** and DSC and in consultation with **OoW**;
- (b) construct and compact the floor of the tailings storages as required to a permeability acceptable to the **DII(Minerals)** and **DECCW** in consultation with **OoW**;

## 5.3 Management of Retained Water – Cyanide Management

- (a) Cyanide levels

The Applicant shall ensure that cyanide levels of the aqueous component of the tailings slurry stream do not exceed:

20mg CN<sub>WAD</sub>/L (90 percentile over six months), and 30mg CN<sub>WAD</sub>/L (maximum permissible limit at any time), at the discharge point to the tailings storages.

- (b) Cyanide management

The Applicant shall prepare a cyanide management plan for the monitoring and reporting of cyanide use on the site, in consultation with **DII(Minerals)**, **DECCW**, and **OoW**, and to the satisfaction of the Director-General, prior to any use of cyanide on the site. The plan shall make provision for, but is not limited to:

- (i) containing cyanide contaminated waters entirely within the mine site;
- (ii) maintaining weak acid dissociable (WAD) cyanide levels at the discharge point to the tailings dams to the levels stated in condition 5.3(a);
- (iii) contingency measures for cyanide reduction.

(Refer condition 8.2(b) for cyanide monitoring details).

- (c) In the event of wildlife deaths occurring due to cyanide, review of cyanide levels shall occur by the **DECCW** in consultation with the Applicant and **DII(Minerals)**. Any decision to require cyanide reduction shall include, but not be limited to, consideration of the number of fauna deaths, the species involved, antecedent condition of species, methods employed at the time to prevent use of tailings dams by fauna, and antecedent climatic and surface water conditions of the Lake and surrounding area. The Applicant shall notify the CEMCC of any reductions in cyanide levels as soon as practicable.

## 5.4 Fuel, Oil and other Chemical Handling

*Note: The development consent conditions under 5.4(a)-(f) are related to offsite risk to people and the biophysical environment. The safety of all persons and operations on site is the responsibility of the **DII(Minerals)** under the Mines Inspection Act and Dangerous Goods Act.*

- (a) Pre-Construction Studies

The Applicant shall prepare and submit for the approval of the Director-General, the studies set out under subsections 5.4(a)(i) to 5.4(a)(iii) (the pre-construction studies), at least one month prior to the commencement of construction of the proposed development, (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Director-General may agree. Construction, other than of preliminary works, shall not commence until approval has been given by the Director-General and, with respect to the fire safety study, approval has also been given by the Commissioner of the NSW Fire Brigades.

- (i) *Fire Safety Study*

This study shall cover all aspects detailed in the **Department's** Hazardous Industry Planning Advisory Paper No. 2, "Fire Safety Study Guidelines" and the New South Wales Government's

“Best Practice Guidelines for Contaminated Water Retention and Treatment Systems”. The study shall also be submitted for approval to the New South Wales Fire Brigades.

The study should, in particular, address the fire related issues associated with the storage and use of Ammonium Nitrate, Sodium Isobutyl Xanthate, and Cyanide.

(ii) *Hazard and Operability Study*

The study is to be chaired by an independent qualified person approved by the Director-General prior to the commencement of the study. The study shall be carried out in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 8, “HAZOP Guidelines”. The HAZOP shall in particular address the monitoring, control, alarm and shutdown systems associated with xanthate and cyanide process streams.

(iii) *Final Hazard Analysis*

The analysis should be prepared in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 6, “Guidelines for Hazard Analysis”.

(b) Pre-Commissioning Studies

The Applicant shall prepare and submit for the approval of the Director-General the studies set out under subsections 5.4(b)(i) to 5.4(b)(iii) (the pre-commissioning studies), no later than two months prior to the commencement of commissioning of the proposed development, or within such period as the Director-General may agree. Commissioning shall not commence until approval has been given by the Director-General.

(i) *Transport of Hazardous Materials*

The study comprises arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the proposed development. The study shall be carried out in accordance with the Department’s draft “Route Selection” guidelines. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.

The study should also address (1) the issues associated with spills, cleanup procedures, training of clean-up teams, communication, and liaison with organisations such as the fire brigades, District Emergency Management Coordinator (and Committee), Local Emergency Management Committee(s), and state emergency services; (2) inspection and monitoring procedures for chemicals such as explosives, xanthates and cyanides prior to commencement of a trip, to verify the integrity of the packaging; and (3) measures to be taken to ensure that the temperature of the materials does not rise above safe levels

(ii) *Emergency Plan*

A comprehensive emergency plan and detailed emergency procedures for the proposed development. This plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan should be in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 1, “Industry Emergency Planning Guidelines”, and include procedures for spillage, cleanup, control and protection, and rescue of wildlife during the emergency.

(iii) *Safety Management System*

A document setting out a comprehensive safety management system, covering all operations on-site and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and should be available for inspection by the Director-General upon request. The safety management system should be developed in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 9, “Safety Management”.

(c) Compliance Reports

One month prior to the commencement of operation of the plant, the Applicant shall submit to the Director-General, a compliance report detailing compliance with conditions 5.4(a) and 5.4(b), including:

- (i) dates of study submission, approval, commencement of construction and commissioning;
- (ii) actions taken or proposed, to implement recommendations made in the studies; and
- (iii) responses to each requirement imposed by the Director-General under condition 5.4(f).

(d) Incident Report

Within 24 hours or the next working day of any incident or potential incident with actual or potential significant off-site impacts on people, or the biophysical environment (including wildlife), report shall be supplied to the Director-General outlining the basic facts and mitigation measures undertaken at the time. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventative measures. The report must be submitted to the Director-General no later than 14 days after the incident or potential accident.

The Applicant shall maintain a register of such accidents, incidents, and potential incidents. The register shall be made available for inspection at any time by the independent hazard auditor and the Director-General.

(e) Hazard Audit

Twelve months after the commencement of operations of the proposed development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive hazard audit of the proposed development and submit a report of the audit to the Director-General.

The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to commencement of the audit. Further audits shall be carried out every three years or as determined by the Director-General and a report of each audit shall within a month of the audit be submitted to the Director-General. Hazard audits should be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines".

(f) Further requirements

The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from the approvals given in respect of conditions 5.4(a) - 5.4(e) above, within such time as the Director General may agree.

## **5.5 Domestic Waste**

The Applicant shall dispose of all solid waste and putrescible matter from the site to the satisfaction of BSC.

## **5.6 Sewage and Associated Waste Management**

The Applicant shall install the site sewage treatment facility, and dispose of treated sewage and sullage to the satisfaction of BSC and DECCW, and in accordance with the requirements of the Department of Health.

## **5.7 Asbestos and Other Hazardous or Toxic Waste Management**

The Applicant shall prior to commencement of construction works prepare a Hazardous Waste and Chemical Management Plan as set out in section 6.4.1 of the EIS in consultation with DECCW and BSC, and to the satisfaction of the Director-General.



## 6. AIR QUALITY, BLAST, NOISE AND LIGHT MANAGEMENT

### 6.1 Air Quality Management

- (a) The Applicant shall prior to commencement of construction works prepare a dust management plan detailing air quality safeguards and procedures for dealing with dust emissions in consultation with the DECCW and to the satisfaction of the Director-General. The management plan shall be updated as required by the Director-General and/or DECCW. The plan shall include, but not be limited to, details of: locations for dust monitoring (in accordance with Australian Standard), including location gauges near the Gumbelah residence, and bird breeding and native flora areas determined by the Applicant in consultation with the DECCW;
- (b) methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions.
- (c) measures to continue baseline monitoring undertaken prior to development consent. (Refer condition 8.3 for air quality monitoring details)
- (d) The Applicant shall ensure that the dust emissions generated by the development do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 2, 3 and 4 at any residence on privately-owned land, or on more than 25 percent of privately-owned land not located within Lake Cowal, as shown in Appendix 3.

Table 2: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>

Table 3: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>

Table 4: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month

Note: Deposited dust is 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.

### 6.2 Dust Suppression and Control

The Applicant shall:

- (i) maintain and use sufficient equipment with the capacity to apply water to all unsealed trafficked areas at a rate which minimises dust emissions;
- (ii) ensure the prompt and effective rehabilitation of all disturbed areas to minimise generation of wind erosion dust, in accordance with the requirements of DI(Minerals);
- (iii) keep the surface of all stockpiles sufficiently treated to minimise windblown dust.

### 6.3 Blasting and Vibration

#### Blasting Impact Assessment Criteria

- (a) The Applicant shall ensure that blasting at the project does not exceed the criteria in Table 5.



Table 5: *Blasting impact assessment criteria*

<b>Location</b>	<b>Time of Blasting</b>	<b>Airblast overpressure (dB(Lin Peak))</b>	<b>Ground vibration (mm/s)</b>	<b>Allowable exceedance</b>
Residence on privately owned land	Any time	120	10	0%
	Day	115	5	5% of the total number of blasts over a period of 12 months
	Evening	105	2	
	Night	95	1	
	Sundays and Public holidays (24 Hrs)	95	1	

### **Blast Management Plan**

- (b) The Applicant shall prepare and implement a Blast Management Plan for the project in consultation with DECCW and to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval by the end of July 2010 and include provisions to:
- (i) evaluate blasting impacts on, and demonstrate compliance with the blasting criteria in this approval for privately-owned residences and structures;
  - (ii) implement best blasting practice to:
    - protect the safety of people, property, public infrastructure, and livestock; and
    - minimise disturbance to bird breeding. and
  - (iii) ensure that blast monitoring data is assessed regularly, and that operations are relocated, modified and/or stopped as required to ensure compliance with the relevant blast criteria.

### **Public Notice**

- (c) The Applicant shall advise residents within two (2) kilometres of the active mining area of future blasting events on a monthly basis, and of any changes to monthly programs.
- (d) Upon written request of the owner of any dwellings located within two (2) kilometres of the active mining area, the Applicant shall arrange at its own costs, for the inspection by a technically qualified person agreed to by both parties, to record the material condition of any structure on such property within 14 days of receipt of the request. The Applicant shall supply a copy of any inspection report, certified by the person who undertook the inspection, to the relevant property owner within fourteen (14) days of receipt of the report.

## **6.4 Noise**

### **Acquisition Upon Request**

- (a) Upon receiving a written request for acquisition from the owner of any land listed in Table 6 following landholder notification in accordance with condition 11.1 of schedule 2, the Applicant shall acquire the land in accordance with the procedures in condition 11 of schedule 2..

Table 6: *Land subject to acquisition upon request*

Coniston
McLintock
West Lea

*Note: To interpret the location referred to Table 6, see Appendix 3.*

- (b) If the noise generated by the development exceeds the criteria in Table 7 at any residence on privately-owned land, or on more than 25 percent of privately-owned land not located within Lake Cowal (as shown in Appendix 3), the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in condition 11 of Schedule 2.

**Table 7: Land acquisition criteria dB(A)  $L_{Aeq}$  (15min)**

<b>Location</b>	<b>Day/Evening/Night</b>
All privately-owned land excluding the land listed in Table 6	40

*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.*

### Noise Impact Assessment Criteria

- (c) The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria in Table 8 at any residence on privately-owned land, or on more than 25 percent of privately-owned land not located within Lake Cowal, as shown in Appendix 3.

**Table 8: Noise Impact Assessment Criteria dB(A)  $L_{Aeq}$  (15min)**

<b>Location</b>	<b>Day/Evening/Night</b>
Bungabulla	39
Coniston	44
Cowal North	38
Gumbelah	39
Lake Cowal (non-Barrick)	38
Laurel Park	39
Mattiske	36
McLintock	41
The Glen	38
West Lea	41
All other residences	35

*Notes:*

- To interpret the locations referred to in Table 8, see Appendix 3.
- 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.
- The noise limits do not apply if the Applicant has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

### Traffic Noise Impact Assessment Criteria

- (d) The Applicant shall take all reasonable and feasible measures to ensure that the traffic noise generated by the project does not exceed the traffic noise impact assessment criteria in Table 9.

**Table 9: Traffic noise criteria dB(A)  $L_{Aeq}$  (1 hour)**

<b>Road</b>	<b>Day/Evening</b>	<b>Night</b>
Ungarie Road	60	55
Wamboyne Road, Blow Clear Road, Carrawandool-Warroo Road, Burcher Road, Condobolin Road, Lake Cowal Road	55	50

*Note: Traffic noise generated by the project is to be measured in accordance with the relevant procedures in DECCW's Environmental Criteria for Road Traffic Noise.*

- (e) Truck movements for material delivery purposes will be restricted as far as practicable to the

day and evening periods.

### **Additional Noise Mitigation Measures**

- (f) Upon receiving a written request from:
- the landowner of the properties in Table 6 (unless the landowner has requested acquisition);
  - the landowner of the properties identified as:
    - Bungabulla;
    - Gumbelah;
    - Laurel Park;
    - The Glen;
    - Cowal North; and
    - Lake Cowal (non-Barrick); or
  - the landowner of privately-owned land where subsequent operational noise monitoring shows the noise generated by the project exceeds the noise limits in Table 8 by more than:
    - 1 dB(A), in the case of the location identified as Mattiske; and
    - 2 dB(A), in the case of all other locations;

the Applicant shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

In the event that other landowners consider that noise at their dwelling which is located along the mine access road between the Mid-Western Highway and the mine site, is in excess of the relevant criteria in Table 9, and the Director-General, in consultation with the DECCW, is satisfied that an investigation is required, the Applicant shall upon receipt of a written request:

- appoint a qualified independent person to undertake direct discussions with the landowners affected to ascertain their concerns and to plan and implement an investigation to quantify the impact and determine the sources of the effect, and
- where the project is identified as the cause/source bear the cost of the independent investigation and if exceedences are identified implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner. These additional mitigation measures shall be approved by BSC prior to implementation

These additional mitigation measures must be reasonable and feasible.

If, within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

At least 3 months prior to increasing the mobile equipment fleet as described in the EA, the Applicant shall notify the following landowners that they may be entitled to receive additional noise mitigation measures, to the satisfaction of the Director-General:

- Bungabulla;
- Gumbelah;
- Laurel Park;
- The Glen;
- Cowal North;
- Lake Cowal (non-Barrick);
- Coniston;
- McLintock; and
- West Lea.

### **Noise Management Plan**

- (g) The Applicant shall prepare and implement a Noise Management Plan for the project in consultation with DECCW and to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval by the end of July 2010 and include provisions to:

- (i) evaluate noise impacts on privately-owned residences
- (ii) demonstrate compliance with the noise impact assessment criteria in Table 8;
- (iii) implement all reasonable and feasible noise mitigation measures;
- (iv) investigate ways to reduce the noise generated by the project, including:
  - off-site road noise; and
  - noise levels which may result in sleep disturbance and disturbance to bird breeding behaviour; and
- (iv) report on these investigations and the implementation and effectiveness of these measures in the AEMR.

## **6.5 Visual Amenity and Lighting**

The Applicant shall take all reasonable and feasible measures, in consideration of Australian Standard AS 4282-1997 *Control of the obtrusive effects of outdoor lighting*, to mitigate visual and off-site lighting impacts of the project, to the satisfaction of the Director-General.

## **7. TRANSPORT AND UTILITIES**

### **7.1 Road Transport**

#### Mine site access road

- (i) The Applicant shall use its best endeavours to ensure that the preferred mine access road routes as described in the EA are the only routes used by employees and contractors travelling to and from the mine site.
- (ii) The mine access road upgrade shall be undertaken in accordance with the approval issued by BSC under Part 5 of the Environmental Planning and Assessment Act, 1979.

(Refer also to conditions 2.2 and 5.4(b)).

## **8. MONITORING/AUDITING**

Monitoring programs in conditions 8.1 - 8.6 below are to be revised/updated annually, unless otherwise directed by the Director-General, to reflect changing environmental requirements significant changes in technology/operational practices and results from monitoring conducted. Changes shall be made and approved through the AEMR process. All monitoring programs shall also be made publicly available at BSC within two weeks of approval of the relevant government authority.

### **8.1 Meteorological**

The Applicant shall continue meteorological monitoring by utilising and maintaining the existing weather station on site. The data shall be particularly used for predicting noise, dust and blasting impacts on nearby residences, and bird breeding areas identified by the Applicant in consultation with DECCW.

### **8.2 Surface and Ground Water and Cyanide**

#### (a) Water monitoring

- (i) The Applicant shall construct and locate:
  - (a) surface water monitoring positions in consultation with OoW and DECCW, and to the satisfaction of the Director-General, at least three months prior to the commencement of construction works unless otherwise directed by the Director-General; and
  - (b) groundwater monitoring positions in consultation with OoW and DECCW, and to the satisfaction of the Director-General at least six months prior to the commencement of construction works unless otherwise directed by the Director-General.
- (ii) The Applicant shall prepare a detailed monitoring program in respect of ground and surface water, including water in the up catchment diversion system, internal catchment

drainage system, dewatering bores, Bland Creek Palaeochannel borefield and water supply pipeline from borefield, pit/void, Lake Cowal, and any other waters in and around the mine site, during construction works, mine operations and post mine operations in consultation with OoW, DECCW, DII(Fisheries) and to the satisfaction of the Director-General. The monitoring program during construction works shall be prepared prior to commencement of construction. The monitoring program during mine operation shall be prepared prior to commencement of mine operation. The monitoring program post mine operations shall be prepared by year 7 of mine operations.

- (iii) The monitoring program will include the development of adequate chemical and biological monitoring in the waters of Lake Cowal, when water is present, by suitably qualified and experienced staff or consultants to the satisfaction of the OoW and DECCW, and in the case of biological monitoring DII(Fisheries). OoW and DECCW must be satisfied as to sampling design, including sample locations, sample frequency, sample handling, transport and analysis, sampling parameters and reporting of analysis results.
- (iv) The results and interpretation of surface and ground water monitoring (including biological monitoring) are to be provided by the Applicant in an approved form to the OoW, DECCW and DII(Fisheries) on a three monthly basis during construction and the first 12 months of ore processing operations and thereafter on an annual basis, unless otherwise agreed by the Director-General. The results are also to be contained and analysed in the Annual Environmental Management Report (Condition 9.2(a)).
- (v) the Applicant shall prior to commencement of construction works prepare in consultation with OoW and DII(Minerals) and to the satisfaction of the Director-General, a monitoring program for the detection of any movement of the Lake protection bund, water storage and tailings structures and pit/void walls during the life of the mine, with particular emphasis on monitoring after any seismic events.

(b) Cyanide monitoring

The Applicant shall prior to any tailings disposal prepare a cyanide monitoring program in consultation with the DECCW and DII(Minerals), and to the satisfaction of the Director-General. The plan shall include, but not be limited to, provision for:

- (i) monitoring of  $CN_{WAD}$  levels of the aqueous component of the tailings slurry stream at the discharge point to tailings dams twice daily or as otherwise directed by the Director-General, with any increases above 20mg  $CN_{WAD}$ /L to be assessed daily to ensure compliance and reported monthly to the DII(Minerals) and DECCW, unless otherwise agreed by the Director-General. If the  $CN_{WAD}$  levels of 30mg/L are exceeded in the liquid at any time, discharge to the tailings dams shall cease until  $CN_{WAD}$  levels can be achieved below the levels stated in condition 5.3(a) and such exceedance shall be reported to the DECCW within 24 hours;
- (ii) monitoring  $CN_{WAD}$  levels in the decant water of the tailings dams twice daily or as otherwise directed by the Director-General;
- (iii) an on site laboratory for quickly establishing  $CN_{WAD}$  levels in the liquid at the discharge point to tailings dams and in the decant ponds for monitoring purposes;
- (iv) on-line monitoring of  $CN(FREE)$  at locations where employees are operating;
- (v) establishing a monitoring regime for detection of cyanide movement beneath and adjacent to the tailings impoundments.

A summary of the cyanide monitoring results shall be provided to the Director-General, DECCW and DII(Minerals) on a three monthly basis, unless otherwise agreed by the Director-General. All results shall be included in the AEMR.

### **8.3 Air Quality and Dust**

The Applicant shall:

- (a) undertake monitoring at locations described in the dust management plan (condition 6.1);

- (b) monitor dust deposition rates and concentrations of total suspended particulates (TSP) for the life of the mine, including monitoring impacts of dust on any surface water within the high water mark of Lake Cowal; and
- (c) provide all results and analysis of air quality monitoring in the AEMR including a determination of the dust deposition rate in gm/m<sup>2</sup>/month, which shall be plotted in the AEMR.

#### **8.4 Deleted**

#### **8.5 Fauna and Flora Monitoring**

The Applicant shall monitor the effectiveness of measures outlined in the fauna management plan and Threatened Species Protocol (condition 3.4). A summary of monitoring results shall be included in the AEMR.

#### **8.6 Cultural Heritage Monitoring**

The Applicant shall monitor the effectiveness of measures outlined in the archaeology and heritage management plan (condition 3.3). A summary of monitoring results shall be included in the AEMR.

#### **8.7 Community Consultative Committee**

##### Community Environmental Monitoring and Consultative Committee (CEMCC)

The Applicant shall:

- (i) establish a Community Environmental Monitoring and Consultative Committee and ensure that the first meeting is held before the commencement of construction works. Selection of representatives shall be agreed by the Director-General and the appointment of an independent Chairperson shall be to the satisfaction of the Director-General in consultation with the Applicant and BSC. The Committee shall comprise two (2) representatives of the Applicant (including the Environmental Officer), one (1) representative of BSC, one (1) representative of the Lake Cowal Environmental Trust (but not a Trust representative of the Applicant), four community representatives (including one member of the Lake Cowal Landholders Association), to monitor compliance with conditions of this consent and other matters relevant to the operation of the mine during the term of the consent.

Representatives from relevant government agencies (including DUAP) may be invited to attend meetings as required by the Chairperson. The Committee may make comments and recommendations about the implementation of the development and environmental management plans. The Applicant shall ensure that the Committee has access to the necessary plans for such purposes. The Applicant shall consider the recommendations and comments of the Committee and provide a response to the Committee and Director-General.

- (ii) The Applicant shall, at its own expense:
  - a) nominate two (2) representatives to attend all meetings of the Committee;
  - b) provide to the Committee regular information on the progress of work and monitoring results;
  - c) promptly provide to the Committee such other information as the Chair of the Committee may reasonably request concerning the environmental performance of the development;
  - d) provide access for site inspections by the Committee;
  - e) provide meeting facilities for the Committee, and take minutes of Committee meetings. These minutes shall be available for public inspection at BSC within 14 days of the meeting.
- (iii) The Applicant shall establish a trust fund to be managed by the Chair of the Committee to facilitate the functioning of the Committee, and pay \$2000 per annum to the fund for the duration of gold processing operations. The annual payment shall be indexed according to the Consumer Price Index (CPI) at the time of payment. The first payment shall be made by the date of the first Committee meeting. The Applicant shall also contribute to the Trust Fund reasonable funds for payment of the independent Chairperson, to the satisfaction of the

Director-General.

- (ix) At least four years prior to mine closure the Applicant shall, in consultation with the CEMCC, identify and discuss post-mining issues, particularly in relation to reduced employment and consequent impacts on West Wyalong, and develop a mine workforce phaseout plan. This plan shall be reviewed and updated in consultation with the CEMCC at the commencement of the final year of mine operations.
- (x) The Applicant shall, in consultation with the CEMCC, develop appropriate strategies to support activities which promote special interest tourism related to the co-existence of mining and the Lake Cowal environment.

### **8.8 Third Party Monitoring/Auditing**

- (a) An Independent Environmental Audit shall be completed:

- six monthly during construction;
- 12 months after commencement of ore processing;
- then every three years thereafter until decommissioning of the mine and ore processing operations respectively, or as otherwise directed by the Director-General.

The Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with ISO 14010 - Guidelines and General Principles for Environmental Auditing, and ISO 14011 - Procedures for Environmental Auditing (or the current versions), and in accordance with any specifications required by the Director-General. Copies of the report shall be submitted by the Applicant to the Director-General, BSC, DECCW, OoW, DII(Minerals) and CEMCC within two weeks of the report's completion for comment.

- (i) The audit shall:
    - a. assess compliance with the requirements of this consent, licences and approvals;
    - b. in the event of any non-compliance, report on the effectiveness of the environmental management of the mine as it may relate to the area of non-compliance;
    - c. be carried out at the Applicant's expense; and
    - d. be conducted by a duly qualified independent person or team approved by the Director-General in consultation with BSC and CEMCC.
  - (ii) The Director-General may, after considering any submission made by the relevant government agencies, BSC and CEMCC on the report, notify the Applicant of any requirements with regard to any recommendations in the report. The Applicant shall comply with those reasonable requirements within such time as the Director-General may require.
- (b) Independent Monitoring Panel
- (i) The Applicant shall at its own cost establish an Independent Monitoring Panel prior to commencement of construction. The Applicant shall contribute \$30,000 per annum for the functioning of the Panel, unless otherwise agreed by the Director-General. The annual payment shall be indexed according to the Consumer Price Index (CPI) at the time of payment. The first payment shall be paid by the date of commencement of construction and annually thereafter. Selection of the Panel representatives shall be agreed by the Director-General in consultation with relevant government agencies and the CEMCC. The Panel shall at least comprise two duly qualified independent environmental scientists and a representative of the Director-General.
  - (ii) The panel shall:
    - a. provide an overview of the independent audits required by condition 8.9 above;
    - b. regularly review all environmental monitoring procedures undertaken by the Applicant, and monitoring results; and
    - c. provide an Annual State of the Environment Report for Lake Cowal with particular reference to the on-going interaction between the mine and the Lake and any



requirements of the Director-General. The first report shall be prepared one year after commencement of construction. The report shall be prepared annually thereafter unless otherwise directed by the Director-General. Copies of the report shall be provided to those parties which receive the AEMR (condition 9.2) and shall be made publicly available at Bland Shire Council within two weeks of the report's completion.

## **9. REPORTING**

### **9.1 Reports on Operations**

The Applicant shall report on mine operations in accordance with the mine operations plan (condition 2.1).

### **9.2 Environmental Reporting**

#### Annual Environmental Management Report (AEMR)

- (i) The Applicant shall, throughout the life of the mine and for a period of at least five years after the completion of ore processing operations, prepare and submit an Annual Environmental Management Report (AEMR) to the Director-General. The AEMR shall review the performance of the mine against the environmental management plans (refer condition 3.2), Mining Operations Plan (refer condition 2.1), the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with EIS predictions, diagrams and tables, the report shall include, but not be limited to, the following matters:
  - a) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals;
  - b) a review of the effectiveness of the environmental management of the mine in terms of DECCW, OoW, DII(Minerals), DII(Fisheries), and BSC requirements;
  - c) results of all environmental monitoring required under this consent or other approvals, which includes interpretation and discussion by a suitably qualified person;
  - d) from results of fauna monitoring, records of any fauna deaths due to mine operations;
  - e) a listing of any variations obtained to approvals applicable to the subject area during the previous year;
  - f) the outcome of the water budget for the year and the quantity of water used from water storages and Bland Creek palaeochannel borefield;
  - g) rehabilitation report;
  - h) environmental management targets and strategies for the next year.
- (ii) In preparing the AEMR, the Applicant shall:
  - a) consult with the Director-General during preparation of each report for any additional requirements;
  - b) comply with any requirements of the Director-General or other relevant government agency; and
  - c) ensure that the first report is completed and submitted within twelve (12) months of this consent, or at a date determined by the Director-General in consultation with DII(Minerals).
- (iii) The Applicant shall ensure that copies of each AEMR are submitted at the same time to the Director-General, DECCW, OoW, DII(Minerals), DSC, DII(Fisheries), the BSC and CEMCC, and be available for public information at the BSC within 14 days of submission to these authorities.

## **10. COMMUNITY CONSULTATION/OBLIGATIONS**

### **10.1 Community Consultation (including Aboriginal community)**

#### **(a) Complaints**

The Environmental Officer (refer condition 3.1) shall be responsible:

- (i) for receiving complaints with respect to construction works and mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, and ensuring that a response is provided to the complainant within 24 hours; and
- (ii) providing a report of complaints received every six months throughout the life of the project to the Director-General, BSC, DECCW, DII(Minerals), and CEMCC, or as otherwise agreed by the Director-General. A summary of this report shall be included in the AEMR (condition 9.2(a)).

## 11 NOTIFICATION OF LANDOWNERS

11.1 At least 3 months prior to increasing the mobile equipment fleet as described in the EA, the Applicant shall notify the landowners of the lands listed in Table 6 in writing that they have the right to require the Applicant to acquire their land at any stage during the development.

11.2 If the results of monitoring required in Schedule 2 identify that impacts generated by the development are greater than the relevant impact assessment criteria, except where a negotiated agreement has been entered into in relation to that impact, then the Applicant shall, within 2 weeks of obtaining the monitoring results, notify the Director-General, the affected landowners and tenants (including tenants of mine-owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in Schedule 2.

### Independent Review

11.3 If a landowner of privately-owned land considers the development to be exceeding the impact assessment criteria in Schedule 2, then he/she may ask the Director-General in writing for an independent review of the impacts of the development on his/her land.

If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 2 months of the Director-General's decision:

- (a) consult with the landowner to determine his/her concerns;
- (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to:
  - determine whether the development is complying with the relevant impact assessment criteria in Schedule 2; and
  - identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and
- (c) give the Director-General and landowner a copy of the independent review.

11.4 If the independent review determines that the development is complying with the relevant impact assessment criteria in Schedule 2, then the Applicant may discontinue the independent review with the approval of the Director-General.

If the independent review determines that the development is not complying with the relevant impact assessment criteria in Schedule 2, then the Applicant shall:

- (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or
  - (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria,
- to the satisfaction of the Director-General.

If the further monitoring referred to under paragraph (a) above determines that the development is complying with the relevant impact assessment criteria, then the Applicant may discontinue the independent review with the approval of the Director-General.

### Land Acquisition

- 11.5 Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the development, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 6.4(f) of Schedule 2;
  - (b) the reasonable costs associated with:
    - relocating within the same local government area, or to any other local government area determined by the Director-General;
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- (1) consider submissions from both parties;
- (2) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
- (3) prepare a detailed report setting out the reasons for any determination; and
- (4) provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Applicant shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Director-General shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above and the independent valuer's report. Within 14 days of this determination, the Applicant shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.

If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Director-General determines otherwise.

- 11.6 The Applicant shall pay all reasonable costs associated with the land acquisition process described in condition 11.5 above.
- 11.7 If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall also pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.

## **12. FURTHER APPROVALS AND AGREEMENTS**

### **12.1 Statutory Requirements**

The Applicant shall ensure that all statutory requirements including but not restricted to those set down

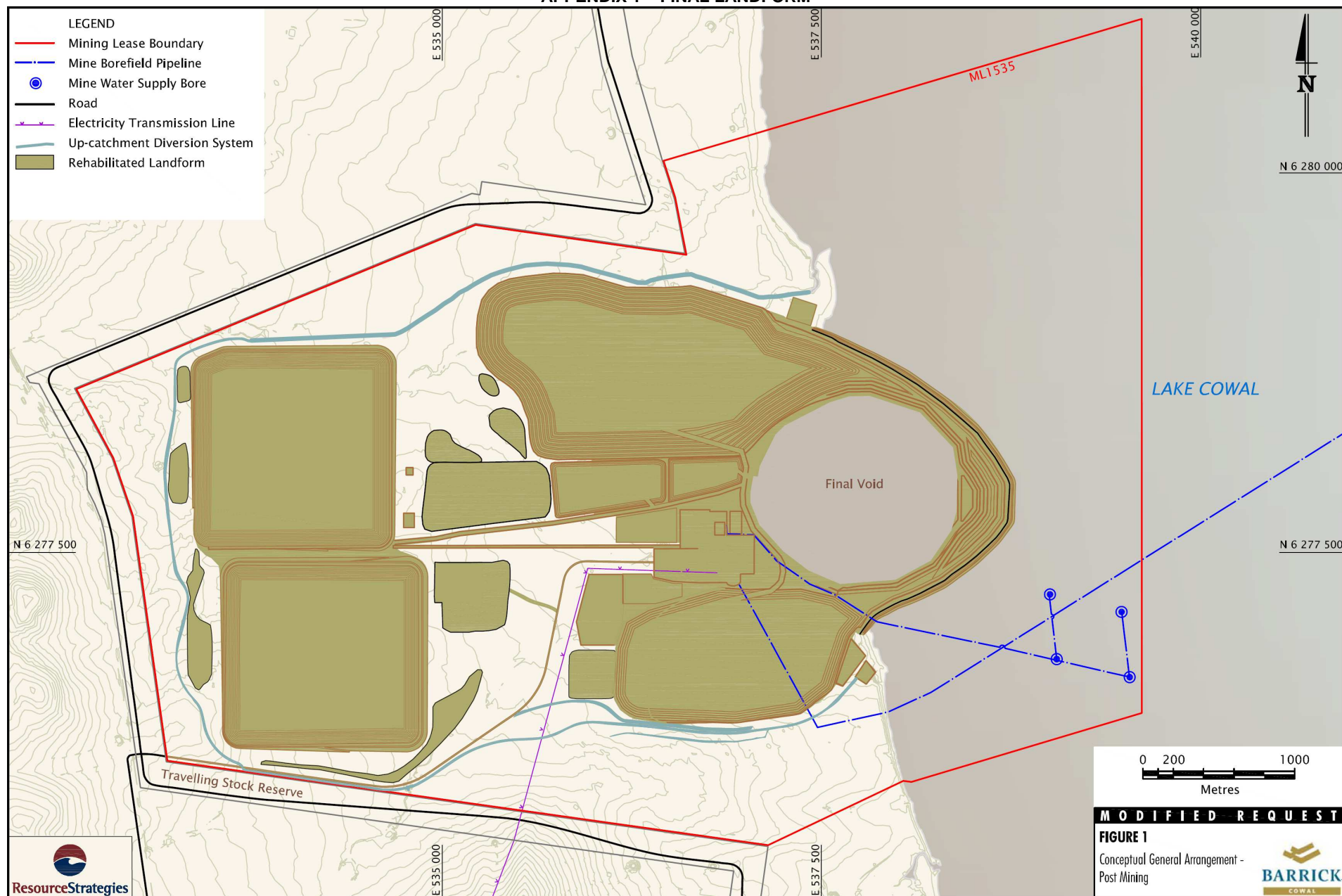
by the Local Government Act 1993, Pollution Control Act 1970, Clean Air Act 1961, Clean Water Act 1970, Noise Control Act 1975, Protection of the Environment Administration Act 1991, Protection of the Environment Operations Act 1997, National Parks and Wildlife Act 1974, and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by the BSC, DECCW, DII(Minerals), DSC, OoW, RTA, DII(Agriculture), DII(Fisheries), and RAC, are fully met.

**Notes:**

1. This approval does not relieve the Applicant of the obligation to obtain any other approval under the Local Government Act, 1993 as amended, the Regulations made thereunder including approval of building plans, or any other Act.
2. Any acceptable levels relating to noise, dust deposition rates, air blast overpressure and vibration etc, contained in this consent are maximum levels. Other agencies, such as the DECCW for example, may grant approvals/licences for certain aspects of the development, which may include consideration of matters such as noise levels etc.

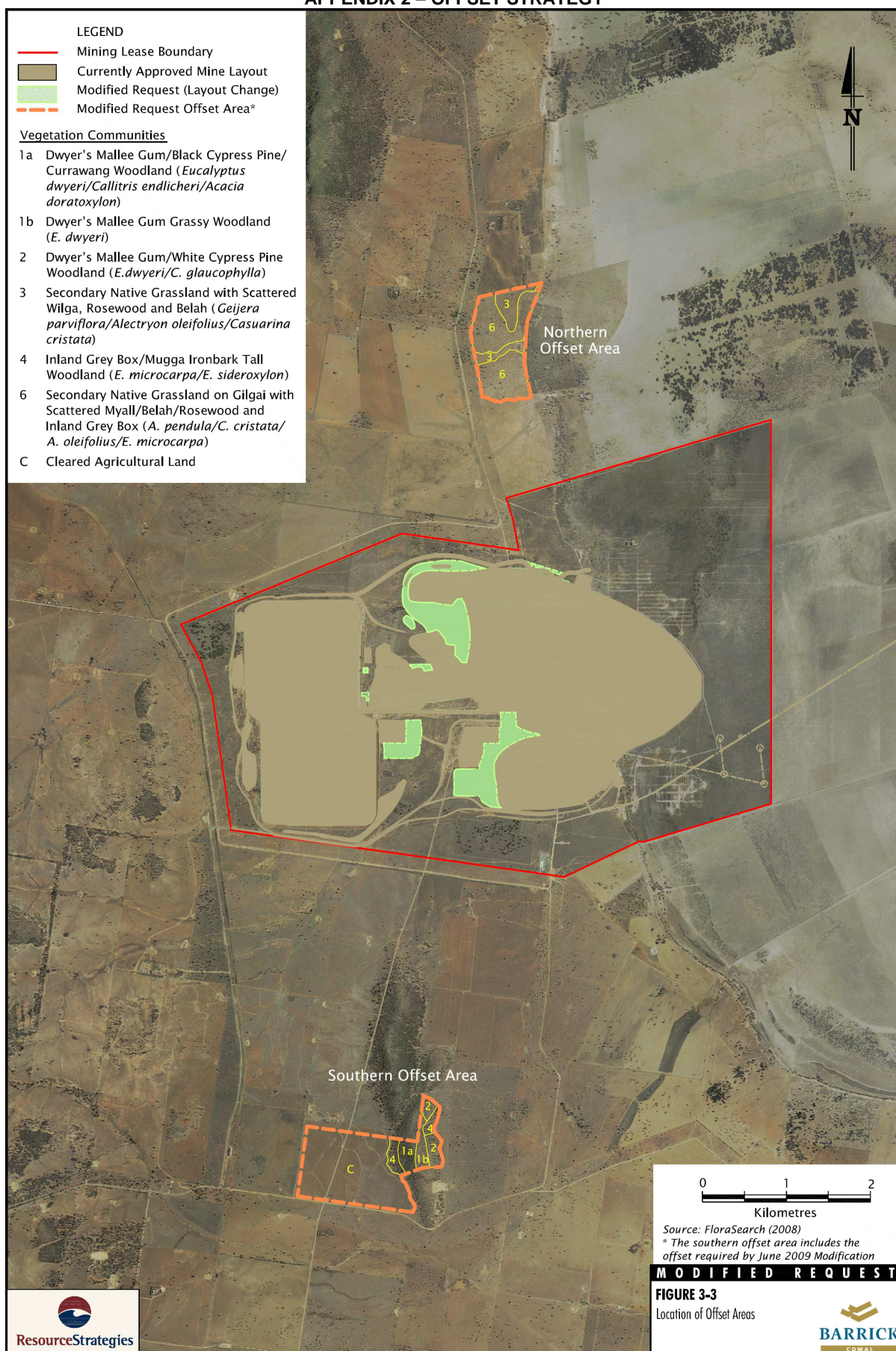
These regulatory processes generally occur after development consent is granted. Some licences (such as Pollution Control Licences) are renewable annually. These approvals/licences may require emission levels that are more stringent than those contained in this consent. This may occur where an agency receives additional information indicating that the emission levels approved in the development consent, are not sufficiently stringent to protect social and/or natural environmental quality.

# APPENDIX 1 – FINAL LANDFORM





## APPENDIX 2 – OFFSET STRATEGY





# APPENDIX 3 – PROPERTY LOCATIONS

