ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

INTEGRATED STATE SIGNIFICANT DEVELOPMENT

DETERMINATION OF DEVELOPMENT APPLICATION PURSUANT TO SECTIONS 76(A)9 & 80

I, the Minister for Urban Affairs and Planning, pursuant to Sections 76(A)9 & 80 of the Environmental Planning and Assessment Act, 1979 ("the Act") and Clause 8 of State Environmental Planning Policy No.34 – Major Employment generating industrial Development determine the development application ("the application") referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedule 2.

The reasons for the imposition of the conditions are to:

(i) minimise the adverse impact the development may cause to surface and groundwater, air quality, noise and scenic quality;

(ii) provide for environmental monitoring and reporting; and

(iii) set requirements for mine infrastructure provision.

Andrew Refshauge MP
Minister for Urban Affairs and Planning,

Sydney, 3 October 2000 File No. S97/02019

Schedule 1

Application made by:	Cadia Holdings Pty Ltd (ACN 062 648 006) ("the Applicant").
To:	The Minister for Urban Affairs and Planning (DA 134-04-00)
In respect of:	Land described in Appendix "1".
For the following:	Development of an underground gold and copper mine, and construction of associated surface facilities ("the Development").
BCA Classification:	Class 5 - Administration Building Class 8 – Mill Buildings Class 10a – Mine Rescue Building, Workshop/Store, Changehouse Class 10b – Washdown Bay, Ore Conveyor, Car park areas, Fuel Storages, Explosive Storage, Southern Tailings Storage Facility, Rodds Creek Dam, Belubula River Pump shed

NOTE:

1) To ascertain the date upon which the consent becomes effective, refer to section 83 of the Act.
2) To ascertain the date upon which the consent is liable to lapse, refer to section 95 of the Act.
3) Section 97 of the Act confers on an Applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.

SCHEDULE 2

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DEFINITIONS

AEMR	Annual Environmental Management Report
CCC	Community Consultative Committee
Construction	Construction of road works, surface facilities and underground workings
CMP	Construction Management Plan
DA	Development Application
DA area	Development Application area which includes all works described in the DA
Director-General	Director-General of the Department of Urban Affairs and Planning or delegate.
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
LGA	Local Government Area
MLA	Mining Lease Area
Mining Operations	Includes ore and interburden extraction, dump areas and tailing storage facilities
MREMP	Mining Rehabilitation and Environmental Management Process
Surface facilities	Bulk Store, Main Workshop, Bath House, Conveyors, Office Complex, Car Port, Explosives Store, Crushing Facility, Workshop Extension, and new Office area

Government Authorities

Councils	Orange City Council, Blayney and Cabonne Shire Councils
OCC	Orange City Council
BSC	Blayney Shire Council
CSC	Cabonne Shire Council
DLWC	Department of Land and Water Conservation
DMR	Department of Mineral Resources
DUAP	Department of Urban Affairs and Planning
EPA	Environment Protection Authority
NPWS	National Parks and Wildlife Service
RTA	Roads and Traffic Authority

1. General

[1]There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, decommissioning of the development.

1.1 Adherence to terms of DA, EIS

(a) The development is to be carried out generally in accordance with Development Application No. 104-04-00, and the EIS dated April 2000, prepared by Resource Strategies Pty Limited and certified in accordance with section 78A(8) of the Act, and all other relevant documentation including additional information provided to DUAP and the Commission of Inquiry including the Primary Submission and responses to questions, and as may be modified by the conditions set out herein.

(b) If, at any time, the Director-General is aware of environmental impacts from the proposal that pose serious environmental concerns, when measured against the criteria set down in the consent, due to the failure of environmental management measures in place to ameliorate the impacts, the Director-General may order the Applicant to cease the activities causing those impacts until those concerns have been addressed to the satisfaction of the Director-General.

(c) If any licence conditions are breached the Applicant shall comply with any modification to the work as specified by the relevant agency.

(d) Development in compliance with this development consent may be carried out notwithstanding conditions 1, 38, 40(c)and 44 of the development consent for the Cadia Hill Mine.

1.2 Period of Approval/Project Commencement

(a) The approval for mining is for a period of 21 years from the date of granting of a mining lease pursuant to this consent.

(b) At least one month prior to commencement of mining operations, 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.

(c) The date of commencement of construction and mining operations is to be notified in writing to the Director-General, DMR and the Councils, at least one week prior to commencement of mining operations.

1.3 Dispute Resolution

(a) In the event that the Applicant, the Councils or a Government Agency, other than DUAP, cannot agree on the specification or requirements applicable under this consent, other than a General Term of Approval, the matter shall be referred by either party to the Director-General or if not resolved, to the Minister for Urban Affairs and

[1]Incorporates EPA General Term of Approval

Planning, whose determination of the disagreement shall be final and binding on the parties.

(b) In the event that there is a dispute in relation to matters of implementation of the consent, other than a General Term of Approval, the matter shall be referred to the Director-General or if not resolved, to the Minister for Urban Affairs and 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 DMR under mining lease approval conditions.

2. Mining Management

2.1 Mining Operations Plan

(a) No mining or other works undertaken in accordance with this consent shall occur until the Applicant has submitted and had accepted by the DMR, a Mining Operations Plan (MOP) in accordance with current guidelines issued by DMR. The Plan covers mining operations for a period of up to seven years.

(b) The MOP shall:

(i) be prepared in accordance with DMR *Guidelines for the Preparation of Mining Operations Plans* (Document 08060002.GUI or its most recent equivalent);

(ii) demonstrate consistency with the conditions of this consent and any other statutory approvals;

(iii) demonstrate consistency with the Environmental Management Plans for the project site;

(iv) provide the basis for implementing mining operations, environmental management, and ongoing monitoring;

(v) include a mine rehabilitation and land use management plan; and

(vi) identify a schedule of proposed mine development for the period covered by the plan and include:

- the area proposed to be impacted by mining activity and resource recovery mining methods and remediation measures,
- areas of environmental, heritage or archaeological sensitivity and mechanisms for appropriately minimising impact.
- water management, and
- proposals to appropriately minimise surface impacts;

(vii) take into account relevant aspects of the Cadia Hill Mine operations where applicable.

(c) A copy of the MOP, excluding commercial in confidence information, shall be forwarded to the Councils and the Director-General within 14 days of acceptance by DMR.

(d) At least two years prior to the cessation of mining operations the Applicant shall investigate, determine and report, taking account of the potential community benefits, on a final strategy for the future use of the mine site, subsidence area, weirs, dams and any other infrastructure in consultation with the DLWC and Councils and for approval of DMR and the Director-General.

2.2 Limits on Production

(a) Ore processed at the mine shall generally not exceed 4.5 million tonnes per annum. The Director-General must be notified prior to any short term increases in output above this level.

(b) No Cyanide or Mercury shall be used for the processing and extraction of gold/copper within the Mining Lease Area.

3. Land and Site Environmental Management

3.1 Appointment of Environmental Officer

(a) The Applicant shall employ a suitably qualified and experienced Environmental Officer(s) throughout the life of the mine, whose appointment is acceptable to the Director-General. The Officer(s) will:

- be responsible for the preparation of the environmental management plans (refer Condition 3.2);
- be responsible for considering and advising on matters specified in the conditions of this consent and advising on compliance with such matters;
- be responsible for receiving and responding to complaints in accordance with Condition 10.2(a);
- facilitate an induction and training program for all persons involved with construction activities, mining and remedial activities; and
- advise the Mine Manager to require reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts and failing the effectiveness of such steps, to stop work immediately if an adverse impact on the environment is likely to occur.

(b) The Applicant shall notify the Director-General, DMR, EPA, NPWS, DLWC, the Councils, and CCC (refer condition 10.1) of the name and contact details of the Environmental Officer(s) upon appointment and any changes to that appointment.

3.2 Environmental Management Strategies and Plans

(a) The Applicant shall prepare an Environmental Management Strategy providing a strategic context for the Site Management Plan and Mining Operations Plan [refer condition 3.2(d)]. The Environmental Management Strategy, Site Management Plan and Mining Operations Plan shall incorporate both the Cadia Hill and Ridgeway Mining Operations. The Environmental Management Strategy shall be prepared in consultation with the relevant authorities to the satisfaction of the Director-General. The Strategy shall be provided to the Director-General no later than the time the first Site Management Plan and Mining Operations Plan are submitted. The Environmental Management Strategy and Site Management Plan may be submitted with the Mining Operations Plan (Refer Condition 2.1).

(b) The Environmental Management Strategy shall include, but not be limited to:

- statutory and other obligations which the Applicant is required to fulfil during construction and mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management including the Environmental Officer (Condition 3.1);
- overall environmental management objectives and performance outcomes, during construction and mining operations, for each of the key environmental elements for which management plans are required under this consent;
- overall ecological and community objectives for the project, and a strategy for the restoration and management of the areas affected by mining operations, including

elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives;

- identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;
- overall objectives and strategies to protect economic productivity within the area affected by mining; and,
- steps to be taken to ensure that all approvals, plans, and procedures are being complied with.

(c) The Applicant shall make copies of the Environmental Management Strategy available to the Councils, EPA, DLWC, NPWS, DMR, NSW Fisheries and the CCC within fourteen days of approval by the Director-General.

(d) The Applicant shall prepare the following environmental management plans/protocols which may form part of an overall Site Management Plan and/or Mining Operations Plan:

- Environmental Management Strategy (refer condition 3.2(a))
- Flora and Fauna Management Plan (refer condition 3.4.1(a))
- Erosion and Sediment Control Plan (refer condition 3.5(b))
- Landscape Management Plan (refer condition 3.7)
- Bushfire Management Plan (refer condition 3.8)
- Land Management Plan (refer condition 3.9(a))
- Site Water Management Plan (refer condition 4.2(a))
- Dust Management Plan (refer condition 6.1(c))
- Blast / Vibration Management Plan (refer condition 6.2(b))
- Noise Management Plan (refer condition 6.3.3(a))
- Construction Noise Management Plan (refer condition 6.3.3(b))
- Road Noise Management Plan (refer condition 6.3.3(c))
- Light Emissions Management (refer Condition 6.4(b))
- Complaints Management and Reporting Protocol (refer Condition 10.2(a))

(e) The management plans shall take into account relevant aspects of the Cadia Hill Mine operations where applicable.

(f) The management plan components are to be revised, and updated as necessary, at least every 3 years or as otherwise directed by the Director-General in consultation with the relevant government agencies. 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 plans. The plans shall also be made publicly available at the Councils within two weeks of approval of the relevant government authority.

3.3 Heritage Assessment, Management and Monitoring

(a) If, during the course of construction of any surface facilities or mining activities, the Applicant becomes aware of any heritage or archaeological material not previously identified, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include NPWS, the NSW Heritage Office, and the relevant the local Aboriginal community. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.

(b) Any proposed works that will affect non-indigenous heritage items must be undertaken in accordance with the recommendations in the *Ridgeway European Heritage Survey and Assessment;*

(c) Blast monitoring must continue at the Cadia Engine House and the impacts of any exceedances to agreed vibration and sound pressure levels must be investigated and if necessary mitigative measures implemented .

Notes: No Aboriginal archaeological sites, that have been identified, shall be destroyed without the approval of the Director-General of NPWS, under section 90 of the *National Parks and Wildlife Act 1974*, prior to any disturbance of the identified sites by Mining Operations.

Wherever possible, the Applicant is to contract representatives of the Orange Aboriginal Land Council to assist in the proposed archaeological investigations and to undertake salvage of artefacts.

3.4 Flora and Fauna Assessment, Management and Monitoring

3.4.1 Terrestrial

(a) The Applicant shall within three months of the granting of consent prepare and implement a Flora and Fauna Management Plan for the DA area. The Plan shall be prepared in consultation with NPWS, and to the satisfaction of the Director-General. The Plan shall be prepared by an appropriately qualified and experienced ecologist to the satisfaction of the Director-General. The ecologist shall consult with any advisory subcommittee established by DMR as part of the MREMP process. The ecologist shall be responsible for providing advice to minimise potential impacts upon threatened and protected fauna species that may utilise the site and to provide expert advice on the regeneration and reconstruction of flora and fauna habitat on mined areas. The Plan shall include but not be limited to:

i) Clearing of vegetation

- details of pre-clearance inspections, including the identification and inspection of trees containing tree hollows, including stags, prior to clearing of any vegetation. This shall be undertaken by an appropriately qualified and experienced ecologist for the presence of any threatened fauna utilising those hollows;
- details of the methods for salvaging and relocating hollow bearing limbs/stags, that have been identified, to areas regenerated with native vegetation or existing areas of native vegetation, to augment and reconstruct faunal habitat. The limbs and trunks are not to be burnt.

ii) Reconstruction of native bushland – Post Mining fauna habitat

- the establishment of long-term post-mining land use objectives over the site;
- details of the principal goal to replace each community type that currently exists on site that will be removed or reduced in area, with communities of same or similar dominant species composition;
- measures to connect existing areas and future areas of habitat rehabilitation to form a network of wildlife corridors throughout the site and to adjoining lands to facilitate species recruitment through natural immigration;
- strategies for the preparation of the site for habitat rehabilitation, as part of the revegetation;
- details of the utilisation of local endemic species or species naturally occurring only in the area of the development for regeneration;
- methods of revegetation;
- measures for the dispersal of rocks and logs of varying sizes throughout the proposed revegetated areas to provide refuge and basking sites for herpetofauna;
- details of the fencing of all habitat rehabilitation areas to prohibit grazing by stock;
- strategies to manage the impact of surface water management, erosion and sediment control measures, and flooding mitigation measures on flora and fauna, including the impact of heavy machinery;
- development of a protocol for identifying and managing significant impacts on any threatened flora and fauna species not identified in the EIS, during development through construction or operation of the mine.

(b) During the life of the mine and until the Mining Lease is relinquished by DMR, the Applicant shall maintain the revegetated areas. Maintenance shall include but not be limited to:

- replanting failed or unsatisfactory areas
- repairing erosion problems
- fire management*
- pest and weed control*
- control of feral animal populations*
- maintain and repair fencing*
- fertiliser application
- watering plants in drier areas, especially in the establishment phase
- application of lime or gypsum to control pH and improve soil structure.

(c) The efforts and progress of the Flora and Fauna Management Plan shall be documented in the AEMR in accordance with the Department of Mineral Resource's *Guidelines to the Mining, Rehabilitation and Environmental Management Process* (March 1998) or its latest version.

3.4.2 Aquatic

(a) The Applicant shall incorporate within the Flora and Fauna Management Plan (Condition 3.4.1(a)) proposals to rehabilitate Company owned land within the riparian zone of creeks as proposed in the EIS, in consultation with NSW Fisheries and to the satisfaction of the Director-General, including:-

- Cadiangullong Creek;
- Swallow Creek and tributaries;
- Cadia Creek upstream of the mine;
- Rodds Creek downstream of the southern tailings storage facility and upstream of the water holding dam;

Riparian rehabilitation where required by the Director-General is to extend from the high water mark; and incorporate, where appropriate control of weed species including willows and privet; provision of stock proof fencing, where practicable, to enable grazing control; and revegetation with suitable native species.

(b) Riparian revegetation of both creeks and dams is to commence within 12 months of approval and is to be maintained during the life of the Mine Lease .

(c) The post mining "swale drains" and "armoured drains" (indicated in Figure A-22 in the EIS) are not to be constructed with a uniformly trapezoidal shape but are to include variations in width and depth to help create habitat suitable for colonisation by aquatic invertebrates and fish.

(d) The proponents are to take reasonable steps to prevent the accidental or deliberate introduction of alien fish species into both Cadiangullong and Rodds Creek Water Holding Dams.

(e) The Belubula River water offtake is to be screened to minimise the entrainment of aquatic fauna. The screens are to be maintained in good working order at all times.

(f) The Flora and Fauna Management Plan (condition 3.4.1) is to include strategies for responses to fish kills to the satisfaction of NSW Fisheries.

3.4.3 Monitoring

(a) The regeneration works shall be monitored by an appropriately qualified and experienced ecologist. the Director-General and DMR shall be notified of the name and qualifications of the ecologist. The results of the monitoring and the effectiveness of the reafforestation shall be publicly reported annually as part of the AEMR.

(b) The Applicant shall prepare a detailed monitoring program of habitat areas on land owned by Cadia Holdings Pty Ltd, which will be impacted on by the development, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development. The program is to be prepared in consultation with NPWS and NSW Fisheries. The monitoring program shall be included in the Flora and Fauna Management Plan (Condition 3.4.1(a)) and a summary of the results shall be provided in the AEMR. The program shall:

  (i) monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall carry out any further works required by the Director-General as a result of the monitoring;

(ii) establish an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristics and structure and to propose contingency measures for improvements to revegetation if required; and

(iii) establish an ongoing monitoring program of fauna species diversity and abundance and the effectiveness of reconstructed ecosystems in providing fauna habitat and contingency measures should impacts be identified as occurring.

Note: The information obtained from the monitoring shall be used to guide future revegetation efforts on the mine site.

3.5 Prevention of Soil Erosion

(a) All works involving soil or vegetation disturbance shall be undertaken with adequate measures to control and minimise soil erosion and the entry of sediments into any river, lake, waterbody, wetland or groundwater system.

(b) The Applicant shall prepare an Integrated Erosion and Sediment Control Plan for the surface facilities and mining operations to the satisfaction of DLWC, DMR, EPA and the Director-General. The Plan shall be prepared and implemented, for any particular aspect of development prior to the commencement of construction of that element of the surface facilities or mining operations.

The Erosion and Sediment Control 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;

(iii) measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The Plan should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing) or its latest version;

(iv) measures developed and implemented to mitigate the impacts of stormwater runoff from the site following the completion of construction activities. The Plan should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA) or its latest version;

(v) details of the proposed measures to maximise the retrieval of topsoil for subsequent use in the rehabilitation program;

(vi) consideration and management of erosion and sedimentation of surface watercourses/waterbodies, including all creeklines within the DA areas;

(vii) measures to construct banks, channels and similar works to divert stormwater away from disturbed and contaminated land surfaces such as mine workings, haul roads, overburden disposal areas, ore handling areas and wastewater treatment facilities. All diversion banks, channels and points of discharge must be constructed or stabilised so as to minimise erosion and scouring; and

(viii) a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved Plan, and EIS.

(ix) details of the management of soil stockpiles, erosion protection and long term viable use (where immediate use is not possible), soil stripping techniques and scheduling; and

(x) 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.

The Plan may be formulated as a revision to the existing Cadia Hill Integrated Erosion and Sediment Control Plan.

(d) Sedimentation dams or other siltation control devices must be constructed to contain or treat surface water runoff from all areas disturbed by mining including overburden dumps, topsoil stockpiles, unsealed roads and areas cleared of vegetation. Sedimentation dams must be designed:

- to provide, to the satisfaction of the DLWC, a minimum dam capacity appropriate to the area draining to each dam;
- so that the maximum flow velocity through the dams meets DLWC guidelines;
- to prevent short circuiting; and
- if inflow is likely to contain oil or other deleterious floating matter a baffle must be installed at the outlet to prevent discharge of that matter.

3.6 Site Rehabilitation Management

The Applicant shall carry out rehabilitation of all mine areas in accordance with the requirements of any Mining Lease granted by the Minister for Mineral Resources and ensure the progressive rehabilitation of the area is also to the satisfaction of DMR and DLWC.

3.7 Visual Amenity and Landscaping

The Applicant shall, prior to the commencement of mining, submit for the approval of the Director-General, in consultation with the Councils, a detailed Landscape Management Plan prepared by a suitably qualified person. The plan shall include, but not be limited to:

- details of the establishment of vegetation and the construction of mounding or bunding, for the purposes of maintaining satisfactory visual amenity, ecological functioning and habitat provision;
- consideration of revegetation works along creeklines and land between the Panuara Road (including the relocated portion) and land to be disturbed by the mine;
- use of indigenous species;
- details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications). Buildings and structures shall be designed and constructed so as to blend as far as possible with the surrounding landscape; and

- details, specifications and staged work programs to be undertaken, including a maintenance program of all landscape works, building materials and cladding.

The Plan may be formulated as a revision to the existing Cadia Hill Landscape Management Plan.

3.8 Bushfire and Other Fire Controls

The Applicant shall:

(a) maintain the existing fire protection works on site, including the availability of trained personnel, water tankers and fire fighting equipment and annual hazard reduction measures with particular attention to boundaries of adjoining landholdings;

(b) prior to commencement of mining operations amend the existing Cadia Hill Mine Bushfire Management Plan to incorporate all holdings contained in the DA, to the satisfaction of the Rural Fire Service as appropriate authority. The Plan will include:

- detail of hazard reduction measures;
- fire fighting facilities available at the site;
- personnel training;
- planned fire trails;
- contingency plans; and
- consultation with NPWS and the DLWC to ensure that impacts on remnant vegetation are minimised.

3.9 Land Management

(a) The Applicant shall, prior to commencement of Mining Operations prepare a Land Management Plan including pest control and weed management for the areas of the proposed surface facilities, and its holdings in the DA area, to provide for proper land management in consultation with DLWC, Councils, Carcoar Rural Land Protection Board, The Upper Macquarie County Council, NPWS and NSW Agriculture , and to the satisfaction of the Director-General. The plan shall include, but not be limited to:

- pastures and remnant vegetation management;
- prevention and rehabilitation of land degradation;
- eradication of vermin and noxious weeds including Willow Tree removal; and,
- feral animal control.

The plan may, where appropriate incorporate and build on existing programs contained in the Cadia Hill Site Management Plan.

4. Water Management and Monitoring

4.1 [2]General

(a) The applicant must obtain all necessary approvals under the *Water Act 1912* from DLWC for water extraction and the provision of structures prior to mining operations commencing.

(b) An approval by DLWC will only be granted to the occupier, as defined in the *Water Act 1912* of the lands where the works are located or used, unless otherwise allowed or authorised under the *Water Act 1912*.

(c) When DLWC grants an approval, it may require any existing approvals held by the Applicant relating to the land subject to this consent to be surrendered or let lapse.

(d) All works subject to an approval under the *Water Act 1912* shall be constructed, maintained and operated in a responsible manner that will minimise the possibility of damage being occasioned by them, or resulting from them, to any public or private property, and to ensure public safety.

(e) The Applicant must, prior to construction of all dams and embankments which fall within the provisions of the *NSW Dams Safety Act*, obtain approval from the NSW Dams Safety Committee. All licensed works that are referrable under the *NSW Dams Safety Act* shall be constructed and maintained in accordance with the provisions of that Act.

4.2 Water Management

The Applicant shall:

(a) prior to the commencement of mining, prepare an integrated Site Water Management Plan for the Ridgeway operations, to the satisfaction of the Director-General and DLWC, which shall include, but not be limited to, the following matters:

- Site water balance;
- management of the quality and quantity of surface and ground water within the areas covered by the Water Management Plan;
- measures to prevent the quality of any surface waters being degraded due to the operation of the mine workings;
- the installation of a network of monitoring bores (as required to monitor impacts on groundwater aquifers and landowners) and surface water monitoring stations on Swallow Creek and Diggers Creek
- details of water makeup and storage on site, including contingencies in the event of very wet or dry conditions occurring. This must provide a water balance for mine water demand;
- measures to ensure that poorer quality class waters are effectively reused on the site including consideration of segregation of waters based on salinity classes and other levels of contamination;

[2] DLWC General Terms of Approval

- details of any licensing requirements for any extractions, storages, or other constructions on the site;
- projection of potential groundwater changes during mining (short term) and post mining (long term) with particular attention given to the affect of changes to groundwater quality and mobilisation of salts;
- a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plans, and EIS; and

The Site Water Management Plan shall include relevant aspects of the Cadia Hill operations where integrated with the Ridgeway operations.

Pollution of waters

(b) [3]Except as may be expressly provided by a licence under the *Protection of the Environment Operations Act 1997* in relation of the development, section 120 of the *Protection of the Environment Operations Act 1997* must be complied with in connection with the carrying out of the development.

(c) [4]The Applicant shall take all reasonable precautions to prevent leakage from all works into an underground aquifer.

(d) [5]Waste water from the mining process must not be discharged onto adjoining roads, crown land or other persons land, or into any river as defined under the *Water Act 1912,* unless otherwise authorised by a licence under the *Protection of the Environment Operations Act 1997.*

4.3 Water Monitoring

(a) The Applicant shall:

(i) construct and locate surface and groundwater monitoring positions, as identified in the Site Water Management Plan (Condition 4.2(a)) to the satisfaction of the Director-General and DLWC, prior to the commencement of mining operations works. Particular regard shall be paid to the project's impact on groundwater quantity and quality and surface water quality and quantity and the options to minimise any identified adverse impacts; and

(ii) [6]prepare a detailed monitoring program in respect of ground and surface water quality and quantity, including water in and around the DA area during mining works and post mine operations to the satisfaction of the Director-General and DLWC. The monitoring program shall:

- monitor surface water and groundwater on a monthly basis, except in drought conditions when monitoring shall be weekly, or as otherwise required by DLWC. Monitoring shall be in accordance with condition 4.2(a) with particular attention given to changes in recorded monitoring results over time, and a range of options to mitigate any adverse impacts;

[3] EPA General Term of Approval
[4] DLWC General Term of Approval
[5] DLWC General Term of Approval
[6] DLWC General Term of Approval

- report all monitoring results in the AEMR;
- provide for review and modification of the monitoring program every two years or as required by DLWC in consultation with the Director-General;
- supply all data in respect of surface and groundwater monitoring to the DLWC on an annual basis or at such other times as may be required by DLWC;

The monitoring program shall be prepared prior to commencement of mining operations. The monitoring program for post-mining shall be prepared by year 10 of mine operations.

(b) The results and interpretation of surface and groundwater monitoring are to be reported in the AEMR. The Applicant shall also provide DLWC with an electronic copy of all monitoring results, if requested.

4.4 Water Contingency Protocol

(a) The Applicant shall:

(i) Provide water as necessary to Swallow Creek and Diggers Creek/Panuara Rivulet such that modelled dry weather baseflows in the headwaters are maintained in those streams, as if unaffected by mining; or

(ii) Provide an equivalent alternative water resource to affected properties;

to the satisfaction of, and for a period following cessation of mining as determined by DLWC and in accordance with the protocol formulated in 4.4(b).

(b) The Applicant shall, within 6 months of the date of the consent, develop an agreed protocol for contingency mechanisms to be put in place to provide modelled baseline flows under prevailing climatic conditions at the headwaters of Swallow Creek and Diggers Creek in circumstances where the monitoring required under Condition 4.3 demonstrates that the actual impacts of the development on groundwater levels and surface water flows at the headwaters of the said creeks are greater than that predicted in the EIS.

The protocol shall be developed by the Applicant and be approved by DLWC. The protocol shall incorporate the following:

- Criteria under which the protocol requirements would be triggered, based on the monitoring of climatic conditions, groundwater levels and surface water flows as measured against predictions contained in the EIS modelling;
- Quantity of compensatory water supplies which would be required to return stream flows at the headwaters of Swallow Creek and Diggers Creek to modelled levels under the prevailing weather conditions;
- Proposed sources of compensatory water and required delivery infrastructure;
- Commitments which ensure that, once the protocol is triggered, infrastructure is operational within 24 hours, to ensure compensatory water is available when required under the protocol;

The protocol shall be publicly available upon request. Any disputes arising from the implementation of the protocol, if enacted, shall be referred to an independent specialist appointed by the Director-General in consultation with the Applicant and

DLWC and paid for by the Applicant for assessment, and referral to the Director General for resolution.

4.5 [7]Water Supply

Belubula River Water Extraction

(a) The Applicant shall install, an approved meter-logger unit with automatic recorder, or such other class of meter or means of measurement as may be approved by DLWC, to record the time and measurements of all water diverted or taken by means of the licenced work at the Belubula River take-off location. The location of the approved, form and type of construction of the appliance shall be to the satisfaction of DLWC.

(b) Works used for the purpose of conveying, distributing or storing water by means of the licensed work shall not be constructed or installed so as to obstruct the reasonable passage of floodwaters flowing into or from a river.

(c) When water is proposed to be sourced from flows released from Carcoar Dam the pump shall not be used for the purpose of extracting water unless the DLWC's Operations Officer at Forbes has been given not less than 4 days notice of the intention to commence pumping.

When water is proposed to be sourced from flows in the Belubula River, that originate other than from Carcoar Dam, the pump shall not be used for the purpose of extracting water unless the flow of water in the Belubula River is greater than, or likely to be greater than 20 megalitres per day at the Helensholme gauge. The holder of the water licence shall advise the DLWC's Operations Officer at Forbes of the intention to commence pumping.

(d) Not more than a maximum quantity of 7,659 megalitres of water for mining purposes, or such other maximum quantity as may be specified by the DLWC from time to time, shall be taken from the Belubula River during any year (commencing on July 1) under Water Licences held by the Company.

(e) The location of the works as shown on a plan retained in the Office of DLWC shall not be altered.

Rodds Creek Water Extraction

(f) The Applicant shall install, an approved meter with automatic recorder, or such other class of meter or means of measurement as may be approved by DLWC, to record the measurements of all water diverted or taken by means of the licenced work. The location of the approved, form and type of construction of the appliance shall be to the satisfaction of DLWC.

(g) The holder of the licence shall install in Rodds Creek, upstream of the Rodds Creek Dam, to the satisfaction of the DLWC, an appliance or appliances for the measurement of the quantity of water entering the storage of the dam on Rodds Creek and supply particulars of such measurements to the DLWC at such intervals as shall be directed by the DLWC.

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(h) In respect of each year commencing 1 July during which the Volumetric Water Allocation scheme for the Belubula – Lachlan system is in force, not more than a maximum quantity of 4,200 megalitres of water for mining purposes shall be taken from Cadiangullong Creek, Cadia Creek, Flyers Creek, Copper Gully Creek and Rodds Creek during any such year under a licence issued with respect to this consent or Licence No: 80SL95192.

(i) The level of the crest of the dam on Rodds Creek shall be fixed at not higher than approximately RL767.00 metres AHD.

(j) The level of the crest of the spillway of the dam on Rodds Creek shall be fixed at not higher than approximately RL764.00 metres AHD.

(k) Works used for the purpose of conveying distributing or storing water by means of the licensed work shall not be constructed or installed so as to obstruct the reasonable passage of floodwaters flowing into or from a river.

5. Hazardous Materials and Waste Management

5.1 Hazards Management

(a) At least one (1) month prior to mining operations commencing under this consent the Applicant shall submit for the approval of the Director-General a program for the implementation of the recommendations contained within the Preliminary Hazard Analysis (Appendix P of the EIS). Where a recommendation requires a study or action plan to be prepared, the Applicant shall ensure that the study/action is completed and fully implemented from the commencement of the date of the relevant activity. Where the Applicant decides not to implement a recommendation in the Preliminary Hazard Analysis or any subsequent studies/action plans, the Applicant shall submit justification for the decision together with any alternatives and seek approval from the Director-General for the change.

(b) At least one month prior to the commencement of mine operations under this consent a comprehensive Safety Management System (SMS), developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.9, "Safety Management"* and covering all operations on-site and associated transport activities involving hazardous materials. The SMS shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures.

5.2 Hazardous and Industrial Waste

[8]Hazardous or industrial waste must be stored and disposed of in a manner to minimise its impact on the environment including appropriate segregation for storage and separate disposal by a waste transporter licensed by the EPA if appropriate. All industrial waste is only to be disposed of offsite at a waste disposal depot licensed by the EPA or with the written agreement of the EPA and the relevant Council.

5.3 Receiving or Disposing of Waste

The Applicant must not except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*:

- receive any waste at the premises for storage, treatment processing or disposal; or
- dispose of any waste on the premises.

This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an Environment Protection Licence under the *Protection of the Environment Operations Act 1997*. The Applicant shall make arrangements for the disposal of domestic waste at a licensed landfill.

5.4 Domestic Waste

The Applicant shall make arrangements acceptable to the Councils, the EPA, and the Department of Health for the disposal of all solid wastes (other than mining wastes) and putrescible matter from the site.

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[8] EPA General Term of Approval

5.5 *Sewerage and Associated Waste*

The Applicant shall prior to construction of any wastewater treatment system, submit full details of the installation and operation of the proposed package sewerage treatment plant to the relevant council for its approval and be in compliance with any requirements detailed by the EPA, the Council of the LGA in which the site effluent management system is located, and NSW Department of Health.

6. Air Quality, Blast, Noise and Light Management and Monitoring

6.1 Air Quality Management and Monitoring

(a) All works and operations must be carried out in a manner that will not cause the dust deposition rate to exceed 2.0 g/m^2/month above the ambient levels outside the boundary of the property owned and controlled by the Applicant.

(b) [9]No chemical odour emissions shall be detectable outside the MLA.

(c) The Applicant shall, prior to the commencement of construction and mining operations, prepare a Dust Management Plan detailing air quality safeguards and procedures for dealing with cumulative dust emissions from the Cadia Hill and Ridgeway operations to the satisfaction of the Director-General. The Plan shall be updated as required by the Director-General. The Plan shall include, but not be limited to, details of:

- protocol for dust suppression on all exposed surfaces;
- the identification of dust affected properties and the relevant dust limits consistent with the EIS and any subsequent submissions to the Department;
- specifications of the procedures for the dust monitoring program for the purpose of undertaking independent dust investigations;
- outline the procedure to notify property owners and occupiers likely to be affected by dust from the mine;
- the establishment of a protocol for handling dust complaints that include recording, reporting and acting on complaints;
- outlining mitigation measures to be employed to minimise dust emissions;
- equipment to be available and used to control dust generation;
- [10]a reactive management strategy to control dust emissions such as the selective rescheduling of operations during the construction phase during adverse operations;
- methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions, particularly from surface activities if the relevant criteria are exceeded;
- identification of longer term strategies directed towards mitigating dust levels that exceed the relevant EPA dust amenity criteria;
- details of locations for dust monitoring and deposition gauges at the residential areas and frequency of monitoring, as agreed with the EPA; and,
- a program to continue baseline monitoring undertaken prior to development consent.

(d) The Applicant shall:

(i) establish dust deposition and total suspended particulate (TSP) monitoring locations for the cumulative mine operations, including sites for monitoring impacts of dust at the nearest non-mined owned residences, and locations as may be determined to be necessary by the Director-General in consultation

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[9] EPA General Term of Approval
[10] EPA General Term of Approval

with the EPA and as appropriate taking into account the Cadia Hill consent, the EIS and the Dust Management Plan referred to in Condition 6.1(a); and

(ii) provide all results and analysis of air quality monitoring in the AEMR including a determination of the dust deposition rate in gm/m^2/month, which shall be reported in the AEMR.

(e) Monitoring of dust deposition and the concentration of total suspended particulate matter and of PM_{10} particulate matter in ambient air must be carried out at locations agreed to in consultation with the EPA. The sampling method, units of measure, interval and frequency of monitoring will be as set out in the (Draft) *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* or its latest version. Monitoring requirements shall be reviewed 2 years from the date of this consent to the satisfaction of the Director-General in consultation with the EPA.

(f) In the event that a landowner or occupier considers that cumulative dust emissions from the combined mining operations at their dwelling are in excess of the relevant EPA dust amenity criteria, and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request:

(i) consult with the landowner or occupants affected to determine their concerns;

(ii) make arrangements for appropriate independent dust investigations by a specialist appointed by the Director-General and paid for by the Applicant, in accordance with the Dust Management Plan, to quantify the impact and determine the source of the effect;

(iii) modify the mining activity in accordance with the Dust Management Plan if exceedances are demonstrated to result from the mine related activity. This shall include:

- introduction of additional controls or modification of operations, to ensure that the dust criteria are achieved; and/or
- enter into an agreement with the landowner or provide such forms of benefit or amelioration as may be agreed between the parties as providing acceptable compensation for the dust levels experienced;

(iv) conduct follow up investigations to the satisfaction of the Director-General, where necessary.

(g) If the above measures outlined in sub-clause (e) above do not result in compliance with criteria or a negotiated agreement, within such time as the Director-General defines, the Applicant shall at the written request of the owner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in Condition 11.1.

(h) Further independent investigations shall cease if the Director-General is satisfied that the relevant consent limits or relevant EPA dust amenity criteria are not being exceeded and are unlikely to be exceeded in the future.

6.2 [11]Blast Management and Monitoring

(a) The overpressure level and peak particle velocity from blasting operations on the premises must not exceed the values in the following table, when measured at any

[11] EPA General Terms of Approval

point that is located at least 3.5 metres from any building or structure at any nearby residential property.

Time of Blasting	**5% exceedance Airblast Emission (dBLinear)**	**5% exceedance ppv ground Vibration (mm/sec)**
Monday to Saturday (10am-6pm)	115	5
Monday to Saturday (6am-10pm and 6pm-8pm)	105	2
Sunday and Public Holidays (6am-8pm)	95	1
Any Day (8pm-6am)	95	1

(b) The Applicant shall prepare and implement a Blast and Vibration Management Protocol to the satisfaction of the Director-General prior to the commencement of any blasting. The Plan must include, but need not be limited to, the following matters:

- compliance standards;
- mitigation measures including measures to ensure compliance with the criteria at 'Barton Park';
- remedial action;
- monitoring methods and program;
- measures to protect underground utilities (rising mains, subsurface telecommunication and electric cables) and livestock nearby; and
- notification of the blasting schedule to landholders and occupants if requested.

The plan may be in the form of an updated version of the existing Cadia Hill Blast Management Plan, incorporating the above criteria.

6.3 Noise Control

6.3.1 Noise Levels

(a) [12]The Applicant shall ensure that the cumulative noise emission from the operation of Ridgeway Project and the Cadia Hill Mine shall not exceed the night time noise limits in Table 1 at the nominated residences.

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Table 1: Noise limits (Night time)

Residential Location as identified in the EIS	Day time Noise Limit L_{A10} $_{(15\ minutes)}$dB(A)	Evening Noise Limit L_{A10} $_{(15\ minutes)}$dB(A)	Night-time Noise Limit $L_{A10\ (15\ minutes)}$dB(A)
Miawarra	45	40	36
Willow Creek	45	40	37
Cornwall	45	40	38
Triangle Flat	45	40	38
Barton Park	45	40	38
Bonnie Glen	45	40	38
Coorabin	45	40	39
Argyle	45	40	39
Glendalough	45	40	39
Weemalla	45	40	39
Merribah	45	40	40
Triangle Park	45	40	40
Mayburies	45	40	40
Mirrabooka	45	40	40
Eastburn	45	40	40
Northwest	45	40	40
South Log	45	40	40
Bundarra	45	40	40

For all other non-mine owned residences, not located on the properties listed in Table 1 above, the noise emission limits in Table 2 apply:

Table 2

Time	**$L_{A10(15\ minutes)}$ dB(A)**
Day time (7am to 7 pm)	45 dB(A)
Evening (7pm to 10 pm)	40 dB(A)
Night time (10pm to 7 am)	35 dB(A)

The noise emission limits in Table 1 and 2 above apply to noise emissions under the following weather conditions:

(i) Vector wind speeds blowing from source to receiver up to 1.5 m/s (at a height of 10m); and

(ii) Temperature inversion with lapse rates up to 3^0C/100m.

The noise limits in Tables 1 and 2 do not apply where the Applicant and the affected landowner have reached a negotiated agreement in regard to noise.

(b) (i) Should the Applicant undertake construction of the Southern Storage Tailings Facility during night time, and a negotiated agreement has not been reached between the Applicant and the affected landowner in regard to noise, the Applicant shall purchase any of the properties 'Bundarra', 'Eastburn', 'Merribah', 'Mayburies', 'South Log' and Northwest' if a written request for property acquisition is served by the owner of the property on the Applicant within 8 years of mining commencing. Acquisition shall be in accordance with the procedures set out in Condition 11.1. This condition will cease to apply to the property 'Mayburies' should that propoerty be sold by the current owners to a third party during the specified period.

(ii) Notwithstanding sub clause (a) above, the area of noise affectation during mining operations is defined by demonstrated exceedance of noise levels (at non-mine owned dwellings) shown in Table 3 below under the same weather conditions as for Tables 1 and 2, other than for the six residences listed in (b)(i) above.

Table 3

Time Period	$L_{A10(15\ minutes)}$ dB(A) re 20 μPa
Night Time	40 dBA
Day Time and Evening	45 dBA

(c) In the event that a landowner or occupier considers that noise from the mining operation at their dwelling is in excess of the noise levels depicted in Table 1 or 2 above, and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request:

(i) consult with the landowner or occupants affected to determine their concerns;

(ii) make arrangements for appropriate independent noise investigations by a specialist appointed by the Director-General and paid for by the Applicant, in accordance with the Noise Management Plan, to quantify the impact and determine the source of the effect;

(iii) modify or cease the mining activity in accordance with the Noise Management Plan, if exceedances are demonstrated to result from the mine related activity. This shall include:

- introduction of additional controls or modification of operations, to ensure that the criteria in Tables 1 and 2 above are achieved;
- with the agreement of the landowner, undertaking of noise control at the dwelling to achieve acceptable internal noise levels;
- enter into an agreement with the landowner or provide such other forms of benefit or amelioration as may be agreed between the parties as providing acceptable compensation for the noise levels experienced; and

(iv) conduct follow up investigations to the satisfaction of the Director-General, where necessary.

(d) If the above measures outlined in sub-clause (c) confirm that the noise limits in Table 3 are being exceeded by the mining operation, the Applicant shall at the written request of the owner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in Condition 11.1.

(e) If continued complaints and noise investigations confirm that noise limits in Table 1 or 2 are being exceeded, but are less than the noise levels in Table 3, the Applicant shall continue to negotiate with the landowner until an acceptable resolution is reached.

(f) Further independent investigations shall cease if the Director-General is satisfied that the relevant consent limits or EPA amenity criteria are not being exceeded and are unlikely to be exceeded in the future.

(g) Where monitoring undertaken as required by Condition 6.3.1(c) demonstrates that noise emissions at non mine owned dwellings as a result of construction of embankment lifts as part of the construction of the southern tailings storage facility, are in excess of the criteria in Table 1, the Applicant shall cease construction works during night time (10:00pm - 7:00am) until such time as the properties have been purchased or the Applicant and affected resident have reached a negotiated agreement in regard to noise. The Applicant shall comply with any requirements of the Director-General concerning the implementation of this condition

(h) The Applicant shall ensure all mobile plant permitted on the mine site is tested for noise emissions as required by the EPA.

6.3.2 Noise Measurements

(a) For the purpose of noise measurement, the L_{A10} noise level must be measured or computed at the most affected area within 30 metres of the residence or at the boundary, if the boundary is closer than 30 metres to the residence, over a period of 15 minutes using "FAST" response on the sound level meter.

(b) For the purpose of the noise measurements referred to in Tables 1 or 2 above, 5dB must be added to the measured level if the noise is substantially tonal or impulsive in character.

6.3.3 Noise Management Plan

(a) [13]The Applicant shall prior to commencement of mining operations, develop a Cumulative Noise Management Plan to the satisfaction of the Director-General and the EPA. The Plan shall:

- outline compliance standards;
- include details of the conduct of noise investigations at six monthly intervals after commencement of works (unless otherwise agreed by the Director-General) to evaluate, assess and report the $L_{A10\ (15\ minute)}$ noise emission levels due to normal operations of the mining operations under adverse weather conditions;
- details of the proposed methodologies including establishing the mine's operating configuration; determining survey intervals; weather conditions and seasonal variations; selecting variations, locations, periods and times of measurements;
- outline the design of any noise modelling or other studies including the means for determining the noise levels emitted by the mining activities;
- particularly focus on the management of night-time noise (10.00pm – 7.00am) for each year of operation;
- identify noise affected properties and the relevant noise limits consistent with the EIS, and additional noise information requested by the EPA;
- specify the procedures for a noise monitoring program, in accordance with

[13] EPA General Terms of Approval

Condition 6.3.5 for the purpose of undertaking independent noise investigations;

- outline mechanisms for community consultation including the procedure for notifying property owners and occupiers likely to be affected by noise from the mine;
- outline the protocol, in accordance with Condition 10.2 for handling noise complaints;
- include contingency measures where noise complaints are received;
- outline mitigation measures (demonstrating best practice) to be employed on the site to limit noise emissions;
- identify longer term strategies directed towards mitigating noise levels that exceed the EPA target noise criteria [45 dB(A) $L_{A10\,(15\,\mathrm{minute})}$ day time and 35 dB(A) $L_{A10\,(15\,\mathrm{minute})}$ night-time] under adverse meteorological conditions;
- outline measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms);
- specify measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they lead to exceedance of the relevant noise criteria;
- survey and investigate noise reduction measures for plant and equipment annually, report in the AEMR, and set targets for noise reduction taking into consideration valid noise complaints in the previous year. The report shall also include remedial measures to achieve compliance with the specified noise goals.

(b) The Applicant shall, prior to commencement of construction, prepare a Road Noise Management Plan to the satisfaction of the Director-General for traffic associated with the cumulative mining operations. The Plan shall form part of the Cumulative Noise Management Plan required in Condition 6.3.3(a). The Plan shall:

- primarily focus on reducing the road noise impacts on private residences along Cadia Road;
- outline mitigation measures to be employed to reduce noise emissions and meet the relevant EPA criteria;
- identify strategies for mitigating noise emissions that exceed the relevant EPA criteria and describe appropriate actions to be undertaken to reduce noise impacts in the event of complaints being received from private residences;
- outline procedures for the ongoing assessment of road noise impacts on private dwellings and identify procedures for the implementation of reasonable mitigation works on private dwellings adversely impacted by road noise from the operation of the mine;
- details of monitoring that will be undertaken; and
- methods for educating drivers in the reduction of road noise impacts.

(c) The Applicant shall also:

(i) make copies of the Plans available to the EPA, the Councils and CCC within fourteen days of approval, or as otherwise agreed by the Director-General; and

(ii) include a summary of noise monitoring results in the AEMR.

6.3.5 Noise Monitoring

(a) The levels of noise emitted from the premises must be monitored for 72 hrs every 3 months at locations agreed to in consultation with the EPA. The monitoring must determine the $L_{A10,\,15min}$, $L_{A90,\,15min}$, and $L_{A1,15}$ and include an assessment of the impact of operational noise on adjoining residents.

(b) Noise monitoring at the specified locations must be undertaken during daytime (7.00am-7.00pm), evening (7.00 pm and 10.00 pm) and night-time (10.00pm-7.00am).

6.4. Light Emissions

(a) The Applicant shall, within operational safety limits, screen or direct all on-site lighting away from residences and roadways to the satisfaction of the Director-General in consultation with Blayney and Cabonne Councils.

(b) The Applicant shall within one month of commencement of the construction, develop and implement a Light Emissions Management Plan to ensure the installation of directional lighting to reduce fugitive emissions leaving the MLA. The performance of this plan shall be included in the AEMR. The program shall specifically address lighting used on the waste rock dump and during construction of the tailings storage facilities, such that any exposed light is shielded from view from a public road.

(c) The Applicant shall provide mitigation measures to reduce the impact of the exposed lighting from the waste rock dump and all operations south of the waste rock dump on the following residences:

'Bonnie Glen'
'Argyle'
'Miawarra'

Such mitigation measures to be undertaken at the written request of the owner and to the satisfaction of the Director-General.

7. Transport and Utilities

7.1 Road Transport

(a) [14]Where practicable, trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

(b) The Applicant shall only use rail transport of concentrate from Blayney. If during the life of the mining operations, rail services are not available to transport the concentrate, the Applicant may apply to the Director-General for permission to temporarily use road transport until such times as rail services are returned top normal.

7.2 [15]Panuara Road Deviation

(a) The Applicant shall fund the cost of construction, relocation of services and dedication to the public of the deviation of Panuara Road around the southern tailings storage facility and the rehabilitation of the existing road pavement from "Stratton Vale" to the intersection with the Four Mile Creek Road to Blayney Shire Council's requirements.

(b) The Applicant shall fund the cost of closing that section of the Panuara Road within the Mining Lease Area impacted by the southern tailings storage facility.

(c) The road pavement of the Panuara Road shall be strengthened and maintained in a safe condition where it is impacted by the crossing of mine traffic. A traffic management plan incorporating traffic control systems and signage is to be developed in consultation with the Blayney Shire Council to ensure the safety of the public at crossing points, prior to commencement of work on either the Belubula River off-take and infrastructure and the southern tailings storage facility.

7.3 Other Roadworks

The Applicant shall fund the following roadworks to the amount required in separate agreements with the Councils:

Orange City

(i) Construction of a roundabout at the intersection of Piesley Street and Kite Street, Orange;

(ii) Construction of a roundabout or traffic signals at the intersection of Piesley Street and Franklin Road, Orange.

Cabonne Shire

(iii) Strengthening Orchard Road and improving associated intersections;

(iv) Improving the pavement and safety of Cadia Road south of the Four Mile Creek Road to the Old Cadia Road intersection;

(v) Reconstruction of the intersection of Cadia Road and Old Cadia Road to improve traffic safety;

(vi) Provision of direction signs from Orange to the mine site;

[14] EPA General Term of Approval

[15] Blayney Shire Council General Terms of Approval

(vii) Upgrade and bitumen seal the Old Cadia Road to the Mining Lease boundary.

Blayney Shire

(viii) Completion of the bitumen seal of Woodville Road to the Cadia Mine entrance on Cadia Road;

(ix) Replacement of Gooley's Creek Bridge.

Note: A Community Enhancement Program agreement has been concluded between the Councils and the Applicant. The program includes funding for additional projects which are outside the scope of this consent. These projects include: bitumen sealing of Four Mile Creek Road from the end of the seal at the Forestry Reserve to Angullong, construction of the 'Newcrest Gallery' at the Age of Fishes Museum, construction of an interpretive centre at the Ophir Gold Fields, and the provision of playground equipment at the Panuara Recreation Reserve.

7.4 Provision of Utility Services

In preparing Mining Operations Plans (refer to Condition 2.1), the Applicant shall consult with affected service authorities and make arrangements satisfactory to those authorities for the protection or relocation of services (such as transmission lines, pipelines, and optic cables).

8. Monitoring/Auditing

8.1 General

(a) In addition to the requirements contained elsewhere in this consent, the Director-General may, at any time in consultation with the relevant government authorities under the MREMP, and the Applicant, require the monitoring programs in Sections 3,4 and 6 of this consent to be revised/updated to reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial monitoring programs. All monitoring programs shall also be made publicly available at the councils within two weeks of approval of the relevant government authority and provided to the CCC.

(b) All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/quality control plan and shall require approval from the relevant regulatory agencies to ensure the effectiveness and quality of the monitoring program. Only accredited laboratories shall be used for laboratory analysis.

8.2 Third Party Monitoring/Auditing

Independent Environmental Audit

(a) An independent environmental audit of compliance shall be carried out at the end of year one (1) and every three years until completion of mining in the DA area, and/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), or an alternative process agreed by the Director-General, 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, the Councils, EPA, DLWC, DMR, NPWS, NSW Fisheries and CCC within two weeks of the report's completion for comment. The audit may be undertaken as part of a joint environmental audit of both the Cadia Hill and Ridgeway operations.

The audit shall:

(i) assess compliance with the requirements of this consent;

(ii) review the effectiveness of the environmental management of the mine, including any mitigation works;

(iii) be carried out at the Applicant's expense; and

(iv) be conducted by a duly qualified independent person or team approved by the Director-General in consultation with the Councils.

(b) The Director-General may, after considering any submission made by the relevant government agencies, the Councils and CCC 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.

(c) At least two years prior to the cessation of mining operations, the Applicant shall investigate, determine and report, taking into account the potential community benefit for a regional water supply storage, on a final strategy for the future use of the mine site, subsidence area, weirs, dams and any other infrastructure. The investigations shall be in consultation with the Councils and for the approval by the Director-General.

9. Reporting

9.1 Reports on Operations

The Applicant shall report on mine operations in accordance with the Mining Operations Plan (Condition 2.1).

9.2 Environmental Reporting

Annual Environmental Management Report (AEMR)

(a) The Applicant shall, throughout the life of the mine and for a period of at least three years after the completion of mining in the DA area, prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of the Director-General and DMR. The AEMR shall review the performance of the mine against the Environmental Management Strategy and the relevant Mining Operations Plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the EIS's predictions, diagrams and tables, the report shall include, but not be limited to, the following matters:

    (i) a review of the effectiveness of the environmental management of the mine in terms of EPA, DLWC, DMR, NSW Fisheries, the Director-General's and Council's requirements. The review shall include a compliance summary of the mine's performance against these requirements;

    (ii) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person;

    (iii) identify trends in monitoring results over the life of the mine;

    (iv) an assessment of any changes to agricultural land suitability resulting from the mining operations, including cumulative changes;

    (v) a listing of any variations obtained to approvals applicable to the subject area during the previous year;

    (vi) the outcome of the water budget for the year, the quantity of water used from water storages and details of discharge of any water from the site;

    (vii) rehabilitation report; and

    (viii) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.

(b) In preparing the AEMR, the Applicant shall:

    (i) consult with the Director-General and DMR during preparation of each report for any additional requirements;

    (ii) comply with any requirements of the Director-General or other relevant government agency; and

    (iii) ensure that the first report is completed and submitted within twelve months of this consent, or at a date determined by the Director-General in consultation with the DMR and the EPA.

(c) The Applicant shall ensure that copies of each AEMR are submitted at the same time to DUAP, EPA, DLWC, NPWS, NSW Fisheries, the Councils, CCC and other members of the AEMR Committee and made available for public information at councils within fourteen days of submission to these authorities.

(d) [16]The results of any monitoring required to be conducted under the EPA's General Terms of Approval, or a licence under the *Protection of the Environment Operations Act 1997*, must be recorded and retained as set out in the licence.

(e) [17]The Applicant must provide an annual return to the EPA reporting on the environmental performance of the development as set out in any licence under the *Protection of the Environment Operations Act 1997.*

9.3 Incident Reporting

(a) Within 24 hours of any incident with actual or potential significant off-site impacts on people or the environment the Applicant shall notify the EPA, DMR and any other relevant agency outlining the impacts. A further detailed written report shall, if requested, be prepared and submitted following investigations of the causes and identification of additional necessary preventative measures and remedial action taken.

(b) The Applicant must nominate at least two persons (and their telephone numbers) who will be available to the EPA on a 24 hours basis, and who have authority to provide information and to implement such measures as may be necessary from time to time to address a pollution incident or to prevent pollution from continuing as directed by an authorised officer of the EPA.

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[16] EPA General Term of Approval
[17] EPA General Term of Approval

10. Community Consultation/Obligations

10.1 Community Consultative Committee

(a) The Applicant shall establish a Community Consultative Committee (CCC) and ensure that the first meeting is held within 3 months of the date of the consent. The members of the CCC shall include:

- An independent chairperson nominated by the Councils and approved by the Director-General;
- Three landowners (who are also local residents), one from each of Blayney, Cabonne and Orange LGAs as community representatives;
- Two representatives of the operating company, one of which must be the Environmental Officer appointed under condition 3.1;
- a representative from each of the Councils or as determined by the Councils.

Meetings shall be held at regular intervals from the date of this consent as determined by the chairperson.

Representatives from relevant government agencies or other individuals may be invited to attend meetings as required by the Chairperson. The CCC shall act as the interface between the company and its operation, and the broader community. A charter for the CCC is to be approved by the Director-General in consultation with the Councils and shall provide for the provision of information and procedures for bringing to the Applicant's attention issues associated with the environmental performance of the mine and implementation of conditions of consent.

The Applicant shall consider the recommendations and comments of the Committee and provide a response to the Committee and Director-General.

(b) The Applicant shall, at its own expense:

(i) nominate two (2) representatives to attend all meetings of the Committee;

(ii) provide to the Committee regular information on the progress of work and monitoring results;

(iii) promptly provide to the Committee such other relevant information as the Chair of the Committee may reasonably request concerning the environmental performance of the development;

(iv) provide access for site inspections by the Committee upon arrangement;

(v) provide meeting facilities for the Committee, and take minutes of Committee meetings. These minutes shall be available for public inspection at the Councils within 14 days of the meeting; and

(vi) meet all reasonable administrative costs associated with operating the CCC up to a value of $2000 per annum indexed according to the Consumer Price Index (CPI) at the time of payment.

10.2 Community Consultation

Complaints Management and Reporting Protocol

(a) The Applicant shall establish a Complaints Management and Reporting Protocol in consultation with the Councils, CCC and the EPA to the satisfaction of the Director-General prior to the commencement of substantial construction. The Complaints Management and Reporting Protocol shall include:

(i) details of a toll-free 24 hour telephone complaints line;
(ii) details of a 24 hour emergency contact number;
(iii) measures to record all complaints received;
(iv) measures to ensure that an initial response to complaints is provided within one working day and a detailed written response, if requested, within 10 days; and,
(v) measures to facilitate negotiated outcomes, including third party mediation.

The Protocol shall be approved by the Director-General and be made publicly available and distributed to the community in pamphlet form.

(b) A report of all complaints received and action taken must be submitted every 6 months throughout the life of the project to the Director-General, the Councils, EPA, DMR and CCC, or as otherwise agreed by the Director-General. A summary of the report shall be included in the AEMR (Condition 9.2).

11. Proponent's Obligations

11.1 Land Acquisition

Note:	In Condition 11.1 (a)-(i) "land" means the whole of a lot in a current plan registered at the Land Titles Office as at the date of this consent.

(a) Where, following the implementation of the measures outlined in Conditions 6.1(f) and 6.3.1(c), compliance with the relevant criteria or a negotiated agreement cannot be achieved within such time as the Director-General defines, the owner of the subject dwelling may request the Applicant in writing to purchase the whole of that property.

(b) The Applicant shall negotiate and purchase a property, as identified in sub-clause (a) above, within six (6) months of a written request from the affected land owner.

(c) In respect of a request to purchase land arising under this condition, the Applicant shall pay the owner the acquisition price which shall take into account and provide payment for:

(i) a sum not less than the current market value of the owner's interest in the land at the date of this consent, having regard to:

- the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and
- the presence of physical improvements on the land and/or any Council approved building or structure which although substantially commenced at the date of request is completed subsequent to that date.

The sum outlined above does not include the value associated with the businesses operating on that land (eg annual turnover / profit or goodwill) but is limited to physical structures and improvements only.

(ii) the owner's reasonable compensation for disturbance allowance and relocation costs within the Orange, Cabonne and Blayney Local Government Areas, or within such other location as may be determined by the Director-General in exceptional circumstances; and

(iii) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired.

(d) In the event that the Applicant and any owner referred to in this condition cannot agree within the time limit upon the acquisition price of the land and/or the terms upon which it is to be acquired, then:

(i) either party may refer the matter to the Director-General, who shall request the President of the Australian Institute of Valuers and Land Economists to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners, a fair and reasonable acquisition price for the land as described in sub-clause (c) and/or terms upon which it is to be acquired;

(ii) in the event of a dispute regarding outstanding matters that cannot be resolved, the independent valuer shall refer the matter to the Director-General, recommending the appointment of a qualified panel. The Director-General, if satisfied that there is need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of:

- the appointed independent valuer,
- the Director-General or nominee, and
- the President of the Law Society of NSW or nominee.

The qualified panel shall determine a fair and reasonable acquisition price as described in sub-clause (c) above and/or the terms upon which the property is to be acquired.

(e) The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or the Director-General and the costs of determination referred to in sub clauses (c) and (d).

(f) Upon receipt of a determination pursuant to sub-clauses (c) and (d), the Applicant shall, within 14 days, offer in writing to acquire the relevant land at a price not less than the determination. Should the Applicant's offer to acquire not be accepted by the owner within six (6) months of the date of such offer, the Applicant's obligations to purchase the property shall cease, unless otherwise agreed by the Director-General.

(g) If only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with obtaining Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.

(h) The provisions of this condition do not apply to a land owner who is the holder of an authority under the Mining Act, 1992.

(i) Notwithstanding any other condition of this consent, the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.

12. Further Approvals and Agreements

12.1 Statutory Requirements

(a) The Applicant shall ensure that all statutory requirements including but not restricted to those set down by the *Local Government Act 1993, Protection of the Environment Administration Act 1991, Protection of the Environment Operations Act 1997, Rivers and Foreshores Improvement Act 1948, Water Act 1912, National Parks and Wildlife Act 1974, Fisheries Management Act 1993* and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by the Councils, EPA, DMR, NPWS, DLWC, RTA, NSW Agriculture, NSW Fisheries, and RAC, are fully met.

(b) A detailed work program outlining the construction program, timing, and staged commencement of the new operations is to be submitted to Blayney and Cabonne Shire Councils and the DMR prior to issue of any Construction Certificate.

(c) All structures shall be constructed in accordance with the normal conditions imposed by the Department in respect of the carrying out of development. Structures shall be constructed in a suitably coloured, non-reflective material to the requirements of the relevant LGA.

(d) [18]The Applicant shall prior to construction obtain approval from the NSW Dam Safety Committee for the construction of all dams and weirs including the tailings storage facility embankments and the Rodds Creek Dam. All required works shall be installed, operated and maintained in accordance with the requirements of the NSW Dams Safety Committee.

(e) The southern tailings storage facility construction shall be supervised by the Applicant's design engineer. Compliance Certificates from the Principal Certifying Authority shall be provided for all stages of construction, to Blayney Shire Council and DUAP.

Structural Adequacy

(f) Detailed plans and specifications relating to the design and construction of all structural elements associated with the proposed development are to be submitted to the Principle Certifying Authority prior to the commencement of construction works. Such plans and specifications must be accompanied by certification provided by a practicing professional structural engineer or an accredited certifier certifying the structural adequacy of the proposed building design and compliance with the *Building Code of Australia*.

Verification of Construction

(g) Upon completion of building works and prior to the issue of an occupation certificate, a certificate/s prepared by a suitably qualified person or a compliance certificate/s issued by an accredited certifier, is to be submitted to the Principal Certifying Authority and the relevant Council of the LGA in which the structures are

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located, certifying that the following building components, where relevant, have been completed in accordance with approved plans and specifications:

(i) footings;
(ii) concrete structures, including ground floor and any subsequent floors, retaining walls and columns;
(iii) framing and roof structure;
(iv) fire protection coverings to building elements required to comply with the *Building Code of Australia*;
(v) mechanical ventilation;
(vi) stormwater drainage;
(vii) dams, weirs; and
(viii) roads.

The certificate/s shall demonstrate at what stage of construction inspections were undertaken.