Environmental Assessment

# Cadia East Project

## SECTION 6

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# 6 STATEMENT OF COMMITMENTS

## 6.1 ENVIRONMENTAL MANAGEMENT AND MITIGATION

Environmental management and mitigation measures to be implemented at the Cadia Valley Operations during the development and operation of the Cadia East Project (the Project) are described in the following sections of the Environmental Assessment (EA):

- Land Resources, Climate and Bushfire Regime – Section 4.1;
- Groundwater – Section 4.2;
- Surface Water – Section 4.3;
- Flora – Section 4.4;
- Fauna – Section 4.5;
- Air Quality – Section 4.6;
- Noise – Section 4.7;
- Aboriginal Heritage – Section 4.8;
- European Heritage – Section 4.9;
- Road Transport – Section 4.10;
- Regional Economy – Section 4.11;
- Employment, Population and Community Infrastructure – Section 4.12;
- Visual Character – Section 4.13; and
- Hazard and Risk – Section 4.14.

Cadia Holdings Pty Limited (CHPL) will prepare and implement the following new plans for the Cadia Valley Operations:

- Groundwater Management Plan; and
- CVO Dewatering Facility Environmental Management Plan.

In addition, CHPL will also review and update the following existing Cadia Valley Operations environmental management plans and monitoring programmes to include Project-related activities, as appropriate:

- Site Management Plan;
- Land Management Plan (LMP);
- Water Management Plan;
- Flora and Fauna Management Plan (FFMP);
- Mine Closure Plan;
- Noise Management Plan (NMP);
- Blasting and Vibration Management Plan (BVMP);
- Dust Management Plan (DMP);
- Integrated Erosion and Sediment Control Plan (IESCP);
- Bushfire Management Plan (BMP);
- Lighting Management Plan;
- Contingency Water Supply Plan;
- Cadia Interpretation Plan; and
- Waste Management Plan (WMP).

CHPL also has a number of management plans relevant to occupational health and safety that will be reviewed and revised, where appropriate (e.g. Major Hazard Management Plan, Safety Management Plans, Emergency Management Plan, Contractor Management Plan, Farm Safety Management Plan and Farm Safety Manual).

In addition to the above management plans, management and mitigation measures for Aboriginal cultural heritage and European heritage will be implemented as described in Appendix K and Appendix L, respectively.

Environmental management plans and monitoring programmes to be prepared or revised are described in further detail below.

***Groundwater Management Plan***

CHPL will develop and implement a Groundwater Management Plan for the area potentially affected by the long-term drawdown from the Project (i.e. Figure 4-13). The Plan will include:

- a compilation of the available construction and use information on each existing bore and spring in the potentially affected area;
- details of an inspection of each bore and spring by a suitably qualified hydrogeologist (where permission from the owner was granted);
- details of the groundwater monitoring programme (location, parameters, frequency and reporting) to be used by CHPL to monitor and detect impacts on local aquifers; and

- details of monitoring triggers and corresponding measures to mitigate Project-induced impacts on water supply availability. The mitigation measures could include, but are not necessarily limited to lowering of pumps, deepening of bores, or provision of new bores/alternative water supplies.

Monitoring of the spring zones identified to the north-east of the Project area will also be undertaken. An initial investigation of the spring zone hydrology will be undertaken to identify the most appropriate springs for long-term monitoring. The investigation will include construction of shallow bores at key springs to determine if the spring is perched or linked to the regional aquifer and to allow measurement of groundwater pressures. The findings of the investigation will be used to determine an appropriate subset of springs that will be most appropriate for monitoring. The investigation will be described and the outcomes incorporated in the Groundwater Management Plan.

***CVO Dewatering Facility Environmental Management Plan***

The CVO Dewatering Facility Environmental Management Plan will be developed and implemented to guide the management of environmental aspects and their potential impacts relevant to the operation of the CVO Dewatering Facility. The broad objectives of the CVO Dewatering Facility Environmental Management Plan will be to:

- minimise the potential for operational activities to adversely impact upon adjoining properties, watercourses and the community;
- minimise disturbance to the existing social and physical environment; and
- adequately monitor operations to allow early detection and mitigation, if required, of any impacts on the existing environment.

***Site Management Plan***

The Cadia Valley Operations Site Management Plan has been developed to provide operational guidelines for the environmental management of the mining operations and adjacent rural properties controlled by Newcrest Mining Limited (Newcrest) and its subsidiary companies.

The Site Management Plan covers the activities of the:

- Cadia Hill Gold Mine (Cadia Hill);
- Ridgeway Gold Mine (Ridgeway);
- Cadia East Exploration Decline;
- associated local infrastructure, such as the Blayney Dewatering Facility; and
- rural properties.

The Site Management Plan forms part of the Cadia Valley Operations Environmental Management System (EMS) and has been prepared in accordance with the Newcrest Environment Policy. The SMP provides background information on the operations and links a number of independent Environmental Management Plans, strategies and protocols.

The Site Management Plan will be reviewed and revised to incorporate the Project.

***Land Management Plan***

The LMP was developed and implemented to ensure sustainable land management practices across all CHPL-owned land. The plan specifically addresses the following broad land management issues:

- weed management;
- vegetation management;
- soils;
- biosolids; and
- land management;

The LMP also addresses rehabilitation of mine disturbed areas associated with the Cadia Hill and Ridgeway operations.

The LMP will be reviewed and revised by a suitably qualified person(s) to include the following measures as part of the Project:

- revegetation to the east of the Rodds Creek Water Holding Dam, which will increase flora habitats; and
- integration of the Vegetation Corridor Programme into the revised LMP.

In addition, the following key measures which will also be provided in the revised LMP in relation to the management of fauna habitats in the surrounding Cadia Valley:

- rehabilitation of Project disturbance areas;
- riparian habitat restoration;
- remnant woodland protection and management;
- weed management measures;
- soil management;
- CHPL farm tree initiative; and
- support to the Flyers Creek Landcare Group

***Water Management Plan***

CHPL has developed and implemented a Water Management Plan to detail all aspects of the water management system at the Cadia Valley Operations. The Water Management Plan will be revised and updated to incorporate changes to the water management system as a result of the Project.

***Flora and Fauna Management Plan***

CHPL has developed and implemented a FFMP to provide measures to minimise impacts on flora and fauna and their habitats (including species listed as threatened under the *Environment Protection and Biodiversity Conservation Act, 1999* and the *Threatened Species Conservation Act, 1995*. Measures include the Vegetation Clearance Protocol and Threatened Species Management Protocol (TSMP).

CHPL will review and revise the FFMP to incorporate new areas and features associated with the Project.

Native seed collection will be undertaken within the Cadia East subsidence zone to augment existing seed collection commitments in the FFMP. In addition, habitat resources, such as hollows, within the Cadia East subsidence zone will be opportunistically salvaged for placement within rehabilitation areas or other fauna habitat enhancement areas, where practicable.

***Mine Closure Plan***

The Mine Closure Plan has been developed to describe closure and rehabilitation requirements of Cadia Hill and Ridgeway and to identify the engineering and rehabilitation costs and activities involved in meeting these requirements. The plan also recognises the risks, liabilities and hazards within each defined area and identifies opportunities for progressive rehabilitation and closure cost savings that require further investigation. The Mine Closure Plan provides the basis for ongoing review of closure concepts and closure provisioning and provides a tool for the input of interested parties.

The Mine Closure Plan will be reviewed and revised to incorporate the Project.

***Noise Management Plan***

Noise mitigation and management measures, and the noise management network for the existing Cadia Valley Operations are described in the NMP. The NMP includes the following mitigation measures:

- regular servicing of the mobile equipment fleet;
- regular maintenance of conveyor belt drives and rollers;
- regular maintenance of underground ventilation fans;
- regular maintenance of reversing alarms on mobile equipment; and
- notification of employees, contractors and visitors to the site of their responsibility to undertake work activities in an environmentally sensitive manner (including minimising noise while on-site or entering and leaving the site).

The NMP will be revised for the Project, where necessary. A noise monitoring protocol will be prepared for the Project and will include noise management strategies and a complaint response protocol. The noise monitoring protocol will be included in the revised NMP.

***Blasting and Vibration Management Plan***

Blasting management measures for the existing Cadia Valley Operations are described in the BVMP. The BVMP includes the management measures listed below:

- The driller and shotfirer will ensure that blastholes are positioned away from cracks and undercuts and are not too close to the face.
- Alter the charge distribution in the blasthole by means such as stem decks or air decks in areas where the face burden is insufficient.
- A maximum of seven rings per blast are fired or timing intervals set for individual blasts.
- If blasting near infrastructure, a thorough risk assessment is completed, controls identified and implemented in a planned manner.
- If a misfire occurs the blast supervisor will determine whether the blast is able to be safely recovered and fired. If refiring does not occur immediately, the blast will be cordoned off and will be fired at the next available blast time.

The BVMP will be revised for the Project, and will include a management protocol to ensure that Maximum Instantaneous Charge for evening and night-time blasts do not result in exceedances of vibration criteria. The BVMP includes a blast vibration monitoring programme.

***Dust Management Plan***

Air quality management measures are currently implemented at the Cadia Valley Operations in accordance with the DMP to minimise the generation of wind blown and mine generated dust. The DMP includes air quality monitoring requirements, complaints handling procedures, management measures and stakeholder consultation requirements. The DMP will be reviewed and revised to incorporate the Project.

Management measures for the Project will include, but will not necessarily be limited to:

- watering of unsealed haul roads and disturbed surfaces (including construction areas);
- restricting the size of disturbed areas as much as practicable;
- collection of fine dust from drilling;
- prevention of truck over-loading;
- regular maintenance of all haul roads;
- enclosure of material transfer points;
- fixed water sprays located on top of the coarse ore stockpiles;
- progressive reshaping and revegetation of waste emplacement areas;
- clear marking of all haul roads; and
- fixed speed limits for all roads around the surface facilities.

CHPL will use real-time monitoring of concentrations of particulate matter less than 10 microns in size ($PM_{10}$), via the Tapered Element Oscillating Microbalance (TEOM), to assist in dust management at the Cadia Valley Operations. An air quality monitoring protocol will be prepared for the Project as part of the DMP and will include management strategies and a complaint response protocol. The air quality monitoring protocol would be included in the revised DMP.

During construction of the CVO Dewatering Facility, the above management measures will be implemented, where practicable. In addition, dust gauges will be installed at potentially sensitive receivers in the vicinity of the facility as part of the DMP.

***Integrated Erosion and Sediment Control Plan***

Erosion control strategies for the construction and operation are currently implemented in accordance with the IESCP. The primary objectives of the IESCP are that:

- soil erosion and sediment generation from areas disturbed by mining and construction activities be controlled; and
- water quality (particularly in terms of total suspended solids content) in local watercourses be maintained to permitted standards.

The IESCP will be revised to include the Project disturbance areas, thus providing an integrated approach to soil and erosion management. The integrated plan will entail sequencing construction works so as to minimise the area of disturbance at any given time.

***Bushfire Management Plan***

CHPL has a BMP in place which was prepared in consultation with relevant local bushfire brigades and addresses all CHPL-owned land. The BMP includes details of training and emergency response procedures, a fuel management plan and an annual hazard reduction programme. The annual hazard reduction programme is prepared in consultation with the Canobolas Zone Bushfire Management Committee. The BMP will be revised as necessary to include the Project. The new revision will be prepared in consultation with relevant local bushfire brigades.

***Lighting Management Plan***

Lighting strategies/control measures to minimise potential artificial lighting impacts for the existing Cadia Valley Operations are provided in the Lighting Management Plan. The Lighting Management Plan will be reviewed and revised to incorporate the Project.

***Contingency Water Supply Plan***

CHPL has a Contingency Water Supply Plan in place which includes details of how and under what circumstances CHPL provide alternative water supply or other agreed measures. CHPL will review and revise the existing Contingency Water Supply Plan to incorporate the details of the alternative stock watering measures for Flyers Creek and the non-CHPL owned property on Cadiangullong Creek.

CHPL will also establish a notification process in the Contingency Water Supply Plan for the non-CHPL owned property on Cadiangullong Creek, NSW Department of Water and Energy (DWE) and NSW Department of Planning (DoP). The notification process will involve CHPL advising these parties when the level in Cadiangullong Dam falls below 20 percent (%) capacity. From this point CHPL will provide weekly updates of the water level in the dam and the inflow amounts until such time as the capacity exceeds 20% (or otherwise agreed). This will provide advance notice of Cadiangullong Dam potentially falling below 10% capacity, and CHPL potentially being no longer able to continue flow releases (if the dam level continues to fall to below the lowest release point).

***Cadia Interpretation Plan***

The location and display of European heritage items potentially impacted by the Cadia Valley Operations is conducted in accordance with the Cadia Interpretation Plan. The Cadia Interpretation Plan will be reviewed and revised, if required, to incorporate the Project.

***Waste Management Plan***

Waste management Strategies are currently implemented at the Cadia Valley Operations in accordance with the WMP. The WMP includes measures to promote best practice disposal of waste products, minimise the production of waste, and ensure that statutory requirements and corporate standards are met. The WMP will be reviewed and revised to incorporate the Project.

## 6.2 COMPENSATORY MEASURES AND OTHER ECOLOGICAL INITIATIVES

An integrated approach to offsetting flora and fauna impacts is proposed. Measures to offset the flora and fauna impacts of the Project will include:

- rehabilitation of post-mining landforms (described in Section 5);
- provision of a Squirrel Glider monitoring programme (described in Section 4.5.3); and
- enhancement and conservation of vegetation and habitat within an offset area.[1]

***Offset Area***

The conservation of the offset area will be secured through rezoning relevant tenure to reflect conservation purposes (e.g. *Zone E2 Environmental Conservation* under the *Standard Instrument [Local Environmental Plans] Order 2006*). The zoning and re-conditioning will be undertaken in consultation with the DoP and Cabonne Shire Council. The security of the offset will be established within 12 months of Project Approval or a time period to the satisfaction of the Director-General of the DoP. The offset area will be managed for conservation purposes in perpetuity.

A management plan will be prepared by a suitably qualified person(s) to facilitate the revegetation and regeneration of native vegetation and habitats and provide a framework for continued management and monitoring. The management plan will be prepared within 12 months of Project Approval or a time period to the satisfaction of the Director-General of the DoP.

[1] The offset area also includes an offset for the disturbance associated with the South Waste Rock Dump modification in accordance with current Cadia Hill Development Consent (DA 44/95) Condition 32A and Ridgeway Development Consent (DA 134-04-00) Condition 3.4.1(e).

The plan will describe measures including, but not necessarily limited to:

- provision of appropriate fencing to exclude grazing from the remainder of the Ulah Property (the background landowner of Black Rock Range) thereby assisting natural regeneration;
- native revegetation plantings using a local seed source;
- removal of unnecessary existing fences to facilitate fauna movement;
- soil erosion management;
- weed and pest management;
- fire management measures to include irregular mosaic burnings;
- signage of the offset area;
- restriction of vehicular and people access; and
- monitoring, auditing and reporting the performance of the offset.

***Squirrel Glider Monitoring Programme***

A monitoring programme will be prepared for the Squirrel Glider within six months of Project Approval. The objectives of the monitoring programme will be to:

- confirm the presence of a viable population of the Squirrel Glider within the remnant and determine the approximate numbers of animals in this population and if possible the sex ratio, age structure and breeding success of the population;
- determine the home ranges of selected individuals within the Squirrel Glider population and their use of existing remnant habitats and adjacent habitats;
- quantify the extent of hollows and other critical resources available to this population within the existing remnant and in adjacent areas;
- detail the use of Squirrel Glider nest boxes as a habitat enhancement option within the offset area; and
- develop and implement management measures for the Squirrel Gliders including a translocation programme[2].

The monitoring programme will be regularly reviewed in accordance with these objectives to facilitate appropriate and flexible management of monitoring methods and design. The review will be conducted by CHPL in consultation with the DoP and NSW Department of Environment and Climate Change (DECC) after the completion of an agreed stage of the monitoring programme, and a report prepared with the findings and implications for the conservation of this population.

***Flyers Creek Restoration Projects***

CHPL will increase its support of the Flyers Creek landcare group and/or assist with the establishment and support a new independent non-profit environmental organisation with the objective of protecting and improving the sustainability of the Flyers Creek catchment area. The organisation would seek to collaborate with the NSW Department of Primary Industries, Lachlan Catchment Management Authority, and other relevant agencies to develop and implement a long-term catchment management plan and drive ongoing water management and agricultural management projects with the involvement of local Flyers Creek landholders.

## 6.3 ENVIRONMENTAL MONITORING

An overview of the environmental monitoring programmes for the Project is provided in Table SOC-1.

An Environmental Monitoring Programme (EMP) will be developed for the Project. The monitoring components in Table SOC-1 will be described in either the EMP and/or other relevant management plans (e.g. FFMP and DMP). Monitoring frequency will be reviewed annually in the Annual Environmental Management Report (AEMR).

## 6.4 REPORTING

Under the *Mining Act, 1992*, environmental protection and rehabilitation are regulated by conditions included in all mining leases, including requirements for the submission of a Mining Operations Plan (MOP) prior to the commencement of operation, and subsequent AEMRs.

Collectively, the MOP and AEMR constitute the *Guidelines to the Mining, Rehabilitation and Environmental Management Process* (MREMP Guidelines) (DPI-MR, 2006) which has been developed by DPI-MR.

[2] Translocation is the movement of living organisms from one area with free release in another.

**Table SOC-1**
**Overview of the Environmental Monitoring Programme**

| Monitoring Focus | Section | Monitoring Sites |
|---|---|---|
| **Meteorology**<br>• Temperature.<br>• Barometric pressure.<br>• Wind direction.<br>• Wind speed. | 4.1.3 | • Southern Lease Boundary [SLB] Station, Ridgeway Station. |
| • Relative humidity.<br>• Solar radiation. | 4.1.3 | • SLB Station. |
| • Rainfall. | 4.1.3 and 4.3.3 | • SLB Station, Ridgeway Station.<br>• PV1A, PV2A, PV3, PV5, PV6, PVCP, PVDC, PVFC, PVLO, PVRO, 412701 and 412702.<br>• Three additional pluviometers in Flyers Creek catchment area.<br>*(Note: Existing monitoring sites are shown on Figure 4-4).* |
| **Groundwater**<br>• Groundwater level. | 4.2.3 | • Brown 3, RO series (RO6A, RO7, RO10A, RO11, RO12), RB Series (1-7), MB series (MB1B, MB3B, MB4B, MB5B, MB6B, MB7B, MB8B, MB9B, MB10B, MB11B, MB19B, MB26A, MB28A, MB29A, MB44A, MB45, MB48, MB49, MB50, MB51, MB52, MB53, MB54, MB55, MB56, MB57, MB58).<br>*(Note: Monitoring sites are shown on Figures 4-6 and 4-14).* |
| • Groundwater quality (pH, electrical conductivity [EC], total suspended solids [TSS], total dissolved solids [TDS], sodium, potassium, calcium, magnesium, iron, chloride, bicarbonate, sulphate, nitrate, zinc, copper, manganese and alkalinity). | 4.2.3 | • CB series (CB6A), MB series (MB1A, MB2A, MB3A, MB4A, MB5A, MB6A, MB7A, MB8A, MB9A, MB10A, MB11A, MB17, MB18, MB19A, MB20-25, MB26B, MB27, MB28-29B, MB30, MB44B, MB48, MB49, MB50, MB51, MB52, MB53, MB54, MB55, MB56, MB57, MB58).<br>*(Note: Monitoring sites are shown on Figures 4-6 and 4-14).* |
| • Groundwater extraction. | 2.10.2 | • CB3, CB6, CB8, CB9, CB11 RE001, RE002, RE004 and RH641. |
| • Groundwater inflows. | 4.2.3 | • Underground workings. |
| **Surface Water**<br>• Surface water flow. | 4.3.3 | • 412080, 412144, 412147, 412161, 412166, 412167, 412168, 412700, 412701, 412702, DCBW1, SCBW2, SCBW3, CGBW, WBW, GP1, GP2, GP3, GP4, GP5, GP7 and GP8.<br>• Additional gauging station on Flyers Creek upstream of Long Swamp Road (412705).<br>• Additional baseflow weir on Cadia Creek upstream of the existing weir (CCBW).<br>*(Note: Monitoring sites are shown on Figure 4-16).* |
| • Surface water quality (pH, EC, TSS, TDS, chloride, sulphate, magnesium, sodium, potassium, manganese, calcium copper, zinc, iron, bicarbonate, nitrate, alkalinity, total nitrogen, total phosphorus). | 4.3.3 | • 412144, 412147, 412161, 412167, 412168, 412702, CAWS2, CAWS10, CAWS17, CAWS18, CAWS30, CAWS31, CAWS33, CAWS34, CAWS35, CAWS36, CAWS37, CAWS41, CAWS42, CAWS43, CAWS44, CAWS45, CAWS47, CAWS48, CAWS49, CAWS50, CAWS52, DCBW1, SCBW2, SCBW3.<br>*(Note: Monitoring sites are shown on Figure 4-16).*<br>• Upstream and downstream of Blayney Dewatering Facility (NEC061 and NEC062).<br>• Additional sites upstream and downstream of CVO Dewatering Facility. |
| • Surface water quality (Total coliforms and *Escherichia coli*). | 4.3.3 | • Potable water sources (POT001 to POT034) and SROP. |
| • Leachate seepage and quality. | 4.3.3 | • Leachate dams (NLEACH, SLEACH, PKLeach1, PKLeach4, PKLeach5, PKLeach6). |

**Table SOC-1 (Continued)**
**Overview of the Environmental Monitoring Programme**

| Monitoring Focus | Section | Monitoring Sites |
|---|---|---|
| • Site water balance. | 4.3.3 | • Cadia Valley Operations site. |
| **Flora**<br>• Threatened species observations/ surveys (in accordance with the TSMP).<br>• Weeds. | 4.4.3 | • Mine disturbed areas. |
| **Fauna**<br>• Threatened species observations/ surveys (in accordance with the TSMP).<br>• Pests. | 4.5.3 | • Mine disturbed areas. |
| • Aquatic macroinvertebrates and fish observations/surveys. | 4.5.3 | • CVOCC1, CVOCC2, CVOCC3, CVOCC4, CVOGC1, CVOFC1, CVOFC2, CVOSC1.<br>*(Note: Monitoring sites are shown on Figure 4-16).* |
| **Black Rock Range Offset Area**<br>• Landscape resilience.<br>• Landscape function.<br>• Habitat quality and function.<br>• Flora species diversity.<br>• Terrestrial fauna use.<br>• Squirrel Gliders.<br>• Weeds. | 4.4.3 and 4.5.3 | • Offset area (to be determined in consultation with DoP and DECC). |
| **Erosion and Sediment Control**<br>• Structural integrity (following rainfall events greater than 10 millimetres [mm] in a 24 hour period). | 4.3.3 | • Sediment dams. |
| **Air Quality**<br>• Real-time $PM_{10}$ concentrations. | 4.6.3 | • TEOM site.<br>*(Note: Monitoring site is shown on Figure 4-4).* |
| • $PM_{10}$ concentrations. | 4.6.3 | • HVAS1, HVAS2, HVAS3.<br>*(Note: Monitoring sites are shown on Figure 4-4).* |
| • Dust deposition. | 4.6.3 | • DGCP1, DG4C, DG4D, DG5, DG8, DG9A, DG12A, DG15, DG16A, DG17 to DG19, DG20A, DG25, DG28 and DG29.<br>*(Note: Monitoring sites are shown on Figure 4-4).* |
| **Noise**<br>• Attended and unattended noise monitoring. | 4.7.3 | • Mayfield', 'Endsleigh Park,' 'Argyle', 'Mount Arthur', 'Triangle Flat', 'Triangle Park', 'Barton Park', 'Bonnie Glen', 'Mayburies', 'Eastburn', 'Northwest', 'Southlog', 'Warrengong' and Blayney (various locations).<br>*(Note: Monitoring sites are shown on Figure 4-4).* |
| **Blasting**<br>• Peak vibration and overpressure. | 4.7.3 | • Chimney, Engine house, Southern Lease Boundary, 'Cornwall', 'Barton Park', 'Coorabin' and 'Wire Gully'.<br>*(Note: Monitoring sites are shown on Figure 4-4).* |
| **Visual**<br>• General inspections.<br>• Tree and shrub survival rates. | 4.13.3 | • Vegetation screens, rehabilitated and landscaped areas. |
| **Rehabilitation**<br>• Parameters developed in consultation with NSW Department of Primary Industries (DPI-MR). | 5 | • Rehabilitated landforms and trial areas. |

The Mining, Rehabilitation and Environmental Management Process (MREMP) is a framework that aims to facilitate the development of mining in NSW in a safe manner such that operations are safe, the environment is protected, the resources are efficiently extracted and rehabilitation achieves a stable, satisfactory outcome (DPI-MR, 2006).

### 6.4.1 Mining Operations Plan

The existing MOP will be revised and updated to include Project-related operations.

The MOP will provide information in regard to the mining, processing and rehabilitation operations, relevant lease and development conditions, licences and other approvals.

The MOP will also describe:

- area(s) to be disturbed;
- mining, rehabilitation and remediation method(s) to be used and their sequence;
- existing and proposed surface infrastructure;
- progressive rehabilitation schedules;
- areas of particular environmental sensitivity;
- land and water management systems; and
- resource recovery.

The MOP will be revised periodically as well as prior to any significant alteration to Project operations.

### 6.4.2 Annual Environmental Management Report

An AEMR for the Cadia Valley Operations will continue to be prepared to address the reporting of the status of approvals, leases, licences and environmental risk management and environmental control strategies.

For the preceding 12 month period, the AEMR will provide a summary of community relations and liaison, mine development and rehabilitation in relation to the MOP. Project environmental performance in relation to the collective conditions of approvals, leases and licences for the previous 12 month period will also be reported.

The AEMR will also include a review and any proposed improvements in relation to environmental monitoring and management systems and environmental performance and will specify environmental and rehabilitation targets to be achieved during the ensuing 12 month period.

### 6.4.3 Other Licences and Approvals

CHPL will report to the relevant authorities in accordance with their licences and approvals (e.g. Environmental Protection Licence No. 5590 requirements, water extraction and bore licences issued by the DWE.

### 6.4.4 Greenhouse Gas Emissions

Greenhouse gas emissions and energy consumption will be reported in accordance with the *National Greenhouse and Energy Reporting Act, 2007* (NGER Act). The NGER Act makes registration and reporting mandatory for corporations whose energy production, energy use or greenhouse gas emissions meet specified thresholds.

### 6.4.5 Community Consultative Committee

CHPL will continue to consult with the local community through the Community Consultative Committee, providing a forum for discussion between representatives of the Cadia Valley Operations and the local community on issues directly relating to CHPL's operations, environmental performance and community relations, and to keep the community informed on these matters.

### 6.4.6 Public Reporting

Monitoring results at the Cadia Valley Operations will be made available on the internet through the Cadia Valley Operations website. The format of reporting on the website will be determined in consideration of appropriate DoP guidelines and standards.