### **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") 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 through water and air pollution, noise, and visual disturbance:
- (ii) provide for environmental monitoring and reporting; and
- (iii) set requirements for mine infrastructure provision.

Andrew Refshauge MP Minister for Planning

Sydney, 18 December 2001 File No. S00/00799

#### Schedule 1

Application made by: Bulga Coal Management Pty Limited

("the Applicant").

**To:** The Minister for Urban Affairs and Planning

(DA 114-05-01)

In respect of: Land described in Appendix "1".

For the following: Development of an underground coal mine, and construction and

operation of associated surface facilities ("the Development").

BCA Classification: Class 5 – Administration: Office

Class 6 - Cribroom
Class 8 - Bathhouse
Stores

Stores Fire Depot

Washdown Bay (if covered) Workshop Conveyors

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.

# APPENDIX 1 Schedule of affected Properties

Local Government Area: Singleton Shire
County: Northumberland
Parish: Wollombi

DP	Lot	DP	Lot
102103	1	755264	36
102103	2	755264	125
133135	3	755264	56
133168	2	755264	81
133168	3	755264	81
174788	Α	755264	103
174788	В	755264	56
205613	1	755264	33
545559	191	755264	61
545559	192	755264	111
561424	3	755270	46
561424	4	755270	68
561424	5	755270	48
561424	6	755270	76
563668	1	755270	72
657988	Pt 1	755270	73
662301	1	755270	123
704474	7	755270	45
723292	1	755270	44
755264	29	755270	43
755264	34	755270	74
755264	31	755270	77
755264	28	755270	78
755264	30	755270	79
755264	PT43	784032	1
755264	44	1015814	1241
755264	105	1015814	1242
755264	27	1015814	1243
755264	51	1015814	1244
755264	53	Cobcroft	Road
755264	54	Charlton Road	
755264	82	Broke Road	(MR 181)
755264	83		

### **SCHEDULE 2**

### Development Consent Conditions for the Beltana No. 1 Underground Coal Mine

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#### **DEFINITIONS:**

**Agricultural productivity** - as defined by the Agricultural Suitability Classification System used by NSW Agriculture. **AEMR** - Annual Environmental Management Report

**Bulga Complex** – the Bulga Complex Mining Lease as illustrated in Figure 1.1 of the EIS titled "Beltana No. 1 Underground Coal Mine", incorporating the Bulga Open Cut, South Bulga Colliery and the Beltana No.1 underground caol mine.

**CCC** – Community Consultative Committee

**Construction** – works to construct permanent out of pit surface facilities including the coal stockpile and conveyors

**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

**First workings** – workings which establish access to the coal resource area and which does not result in surface subsidence. First workings do not include longwall extraction of coal.

**Independent Dispute Resolution** - defined in a flow chart which indicates DoP will appoint an independent dispute facilitator to deal with the matters of concern (refer Schedule A)

**Land-use capability -** refers to the ability of a parcel of land to accept a type and intensity of use permanently, or for specified periods under specific management, without permanent damage. Land capability is defined by the Rural Land Capability Classification, developed by the former NSW Soil Conservation Service, now part of the Department of Land and Water Conservation.

**Mining Operations** – all Mining Operations excluding exploration activities.

**MOP** – Mining Operations Plan

ROM - Run of Mine

**Safe, serviceable and repairable criteria** – Category 3 to 5 for strain and/or category C or D for tilt, in accordance with Australian Standard AS2870-1996

**Secondary Workings** – extraction of coal from underground mining that may result in surface subsidence. **Surface facilities** – permanent out of pit– conveyors, office, amenities coal stockpile and associated infrastructure.

#### **Government Authorities**

SSC - Singleton Shire Council

**DLWC** - Department of Land and Water Conservation

**DMR** - Department of Mineral Resources

**DoP** – Department of Planning

**EPA** - Environment Protection Authority

MSB - Mine Subsidence Board

NPWS - National Parks and Wildlife Service

NSW Fisheries – New South Wales Fisheries

NSW Agriculture - New South Wales Agriculture

RTA - Roads and Traffic Authority

**Note:** To assist with the explanation of the intent of certain conditions in this consent, a number of flow charts are provided in the attached Schedule A, which illustrates the various processes contained in this consent.

#### 1. General

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, etc.

- (a) The development is to be carried out generally in accordance with development application No. 114-05-01, and the EIS titled "Beltana No. 1 Underground Coal Mine Environmental Impact Statement," dated May 2001, prepared by Umwelt Australia Pty Limited and certified in accordance with Section 78A(8) of the Act, and the response to submissions prepared by Umwelt Australia Pty Limited dated August 2001, 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 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.

## 1.2. Period of Approval/Project Commencement

- (a) This consent is limited to a period 21 years from the date of this consent.
- (b) At least two weeks prior to the commencement of construction and Mining Operations respectively or within such period as agreed by the Director-General, the Applicant shall submit for the approval of the Director-General a compliance report detailing compliance with all the relevant conditions that apply prior to the commencement of construction and Mining Operations.
- (c) Date of commencement of construction and Mining Operations is to be notified in writing to the Director-General, and SSC, at least two weeks prior to commencement of construction and Mining Operations respectively.

### 1.3. Dispute Resolution

In the event that the Applicant, SSC or a Government agency, other than the Department of Planning, cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or if not resolved, to the Minister for 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. Mine Management

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

(a) No mining 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 MOPs (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;
- (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; and
- (c) In preparing the MOP, the Applicant shall consult with affected service authorities and make arrangements satisfactory to those authorities for the protection or relocation of those services.
- (d) A copy of the MOP, excluding commercial in confidence information, shall be forwarded to SSC and the Director-General within 14 days of acceptance by DMR.
- (e) 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 and any general infrastructure components, in consultation with DoP, DLWC and SSC and for approval of DMR and the Director-General.

#### 2.2. Spontaneous Combustion

The Applicant shall, prior to the commencement of Secondary Workings, prepare or review and update the existing Spontaneous Combustion Management Plan for the Bulga Complex to the satisfaction of DMR.

#### 2.3. Limits on Production

ROM coal production from the Beltana No. 1 project shall not exceed 6 Mtpa. The Applicant must notify the Director-General and SSC prior to any short term increase in production above these levels.

### 2.4. Construction Hours of Operation

Construction activity associated with out of pit surface facilities may only be undertaken between Monday and Saturday, 7.00am to 6.00pm.

### 3. Land and Site Environmental Management

### 3.1 Appointment of Environmental Officer

- (a) The Applicant shall ensure that a suitably qualified and/or experienced Environmental Officer is available throughout the life of the mine and shall consult with the Director-General prior to the appointment of the Environmental Officer for the Beltana No.1 mine. The Environmental Officer shall be responsible for:
  - (i) be responsible for the preparation of the environmental management plans (refer to Condition No. 3.2);
  - (ii) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;
  - (iii) be responsible for receiving and responding to complaints in accordance with Condition 10.2(a);
  - (iv) facilitate an environmental induction and training program for all persons involved with construction activities, mining and remedial activities; and
  - (v) make recommendations to the Mine Manager to take reasonable steps to avoid or minimise adverse environmental impacts. The Mine Manager shall issue instructions to stop work if a significant adverse impact on the environment is likely to occur.
- (b) The Applicant shall notify the Director-General, DMR, MSB, EPA, NPWS, DLWC, NSW Fisheries, SSC, and CCC (refer condition 10.1) of the name and contact details of the Environmental Officer, if it has not already done so, and any changes to that appointment.

### 3.2 Environmental Management Strategies and Plans

- (a) The Applicant shall prepare an Environmental Management Strategy, or review and update the existing Bulga Complex Environmental Management Strategy, providing a strategic context for the environmental management plans [refer condition 3.2(d)]. The Environmental Management Strategy shall be prepared following consultation with the NPWS, DLWC, EPA, DMR, NSW Fisheries, SSC, and the CCC (refer condition 10.1) and to the satisfaction of the Director-General. The strategy shall be provided to the Director-General no later than the time the first Environmental Management Plan under sub-clause (d) below is submitted.
- (b) The Environmental Management Strategy shall include, but not be limited to:
  - (i) 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;
  - (ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer;
  - (iii) overall environmental management objectives and performance outcomes, during construction, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent;
  - (iv) 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;
  - (v) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;
  - (vi) steps to be taken to ensure that all approvals, plans, and procedures are being complied with;
  - (vii) processes for conflict resolution in relation to the environmental management of the project; and
  - (viii) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.
- (c) The Applicant shall make copies of the Environmental Management Strategy available to SSC, EPA, DLWC, NPWS, DMR, MSB, NSW Fisheries and the CCC within fourteen days of approval by the Director-General.

- (d) The Applicant shall prepare, or revise existing plans for the Bulga Complex where specified, the following environmental management plans:
  - (i). Private Property Subsidence Management Plans (Condition 3.3.1)
  - (iii). Longwall Subsidence Management Plan (Condition 3.3.2)
  - (iv) Archaeology and Cultural Management Plan (Condition 3.4)
  - (v) Flora and Fauna Management Plan (Condition 3.5.1)
  - (vi) Erosion and Sediment Control Plan (Condition 3.6(a))
  - (vii) Stream Remediation Plan (Condition 3.6(c))
  - (viii) Landscape and Revegetation Management Plan (Condition 3.8)
  - (ix) Bushfire Management Plan (Condition 3.9)
  - (viii). Land Management Plan (Condition 3.10)
  - (ix) Site Water Management Plan (Condition 4.1)
  - (xi) Waste Management Plan (Condition 5(c))
  - (xiii) Dust Management Plan (Condition 6.1.2)
  - (xiv) Noise Management Plan (Condition 6.3.4)
  - (xv). Lighting Management Plan (Condition 6.4(b))
  - (xvi) Public Road Management Plan (Condition 7.7)
  - (xvii) Joint Acquisition Management Plan (Condition 11.3)

These environmental management plans may also form part of the overall Site Management Plan and/or Mining Operations Plan.

- (e) The Applicant shall make copies of the environmental management plans in sub-clause (d) above available to the relevant government agencies, SSC and CCC, and ensure that the plans are made publicly available within 14 days of approval by the Director-General.
- (f) The management plans are to be reviewed, and updated as directed by the Director-General, in consultation with the relevant government agencies. The review should consider changing environmental requirements or changes in technology/operational practices. Any changes which are made shall be made and approved in the same manner as the initial environmental management plan. The plans, excluding individual property subsidence management plans, shall also be made publicly available at SSC within two weeks of approval by the DoP.

#### 3.3 Longwall Subsidence Management and Monitoring

### 3.3.1. Private Property Subsidence Management Plans

- (a). The Applicant shall prepare a Property Subsidence Management Plan to the satisfaction of the Director-General of DMR (or delegate) for each private property which is not owned by or leased or licensed to the Applicant, for which an application for Secondary Workings approval under s.138 of the Coal Mines Regulation Act 1982 is being prepared.
- (b). At least nine (9) months prior to the extraction of coal from Longwall Panel 1 and two (2) years prior to the extraction of coal from Longwall Panel 5 by longwall mining referred to in subclause (a) above or other mining methods requiring approval under s.138 of the Coal Mines Regulation Act 1982, the Applicant will advise each landowner within the area covered by the s.138 application referred to in subclause (a) of:
  - (i) The Applicant's plans for future mining activities and the specific impacts (based on best available information) affecting each property; and

- (ii) Requirements regarding landowner consultation arrangements and offers of assistance to meet landowner legal and associated costs for determining landowner rights under law and the conditions of consent and reaching property agreements and valuations, as detailed in Condition 3.3.1(g).
- (c). The relevant Property Subsidence Management Plans shall be completed prior to seeking approval under s.138 of the Coal Mines Regulation Act 1982 for the Secondary Workings referred to in subclause (b) above.
- (d). Each Property Subsidence Management Plan shall demonstrate consistency with the relevant MOP and the Environmental Management Strategy.
- (e). In preparing Private Property Subsidence Management Plans the Applicant shall:
  - consult with each affected landowner throughout the preparation process and take their views into account. This consultation shall include discussions on integrating any proposed mitigation works with the management of the property as a whole;
  - (ii) update geological data (i.e. geological structures and seam thickness) based on current knowledge;
  - (iii) review, and if necessary update, the mine plan based on current geological knowledge;
  - (iv) review and revise as necessary, subsidence predictions taking into account the results of any relevant subsidence monitoring that has been undertaken;
  - take into account any structural inspection conducted by the MSB of each structure and any report prepared by the MSB on the structural integrity of all buildings in their entirety (including roofs, ceilings, openings, foundations and household sewage treatment and disposal systems);
  - (vi) assess as far as practicable current agricultural utilisation, agricultural improvements and the underlying agricultural suitability of the relevant property;
  - (vii) ensure that inspections, surveys and assessments referred to in subclauses (v) and (vi) are carried out, at the expense of the Applicant, by an independent and technically qualified person, selected in consultation with the relevant property owner, and a copy of any report, certified by the person who undertook the work, supplied to the relevant property owner within fourteen days of receipt of same;
  - (viii) support the continuation of agricultural activities and where reasonably practicable, improve the opportunity for sustained agriculture where any surface remedial works can be used to improve such productivity.
  - (f). In preparing the individual Private Property Subsidence Management Plans the Applicant shall also:
    - (i) advise affected landowners of any potential impacts of the proposed mining and review and discuss implementation procedures;
    - (ii) provide a copy of the draft Property Subsidence Management Plan to the relevant landowner;
    - (iii) identify dwellings that are likely to be subject to damage beyond safe, serviceable and repairable criteria as a result of the development;
    - (iv) identify structures and surface improvements that are likely to be subject to significant damage as a result of the development;
    - (v) identify agricultural values that are likely to be affected by the development;
    - (vi) convene an on-site meeting with the landowner to review the draft Property Subsidence
      Management Plan including, where applicable, MSB technical officers with respect to dwellings that
      are predicted to be damaged beyond safe, serviceable and repairable criteria;
    - (vii) investigate feasible mitigation measures that can be implemented to reduce subsidence impacts to the satisfaction of the landowner and in consultation with MSB;
    - (viii) investigate other options if subsidence impacts beyond the safe, serviceable and repairable criteria cannot be reduced satisfactorily, such as compensation, acquisition, temporary relocation, or any other form of agreement with the landowner;
    - (ix) identify areas of likely compensable loss as defined by the Mining Act 1992, and either attempt as far as practicable to reach agreement with the landowner in regard to likely compensable loss, or determine in consultation with the landowner suitable mitigation measures to minimise compensable loss; and
    - (x) provide a copy of each Property Subsidence Management Plan to the relevant landowner.
  - (g). In implementing the terms of any Property Subsidence Management Plan the Applicant shall:

- (i) review, based on information available at the time, the potential impacts of the proposed mining on ecologically sensitive areas, archaeological resources and heritage resources and take these into consideration in any refinement of the mine plan and design of appropriate mitigation measures. Works should be designed where possible to avoid areas of ecological and archaeological sensitivity unless works are being specifically undertaken to conserve or manage these areas; and
- (ii) attempt as far as practicable to determine in consultation with the landowner, DLWC, MSB and SSC, appropriate drainage mitigation measures and earthworks, consistent with the relevant environmental management plans. Where it is indicated that drainage works are required to be undertaken on other land to mitigate remnant ponding on the property which is the subject of the Property Subsidence Management Plan, the Applicant shall seek to reach an agreement with the owner(s) of that land prior to carrying out such works. In determining appropriate drainage mitigation works, the Applicant shall take into consideration environmental, archaeological and heritage aspects of areas where mitigation works are proposed. The Applicant shall pay any reasonable costs for landowners to obtain legal and other advice on Property Subsidence Management Plans.

### 3.3.2. Longwall Subsidence Management Plans

- (a). The Applicant shall prepare a Longwall Subsidence Management Plan to the satisfaction of the Director-General of DMR (or delegate) for each longwall panel or group of panels for which an application for Secondary Workings approval under s. 138 of the Coal Mines Regulation Act 1982 is being prepared.
- (b). The Longwall Subsidence Management Plan shall be completed prior to an approval under s.138 of the Coal Mine Regulation Act 1982 for Secondary Workings. Each Longwall Subsidence Management Plan shall be consistent with the conditions of this consent, the Environmental Management Strategy and any relevant management plans.
- (c). The Applicant may incorporate the Private Subsidence Management Plans (Condition 3.3.1) within any Longwall Subsidence Management Plan.
- (d). In preparing the Longwall Subsidence Management Plans, the Applicant shall:
  - (i) consult with the SSC, DLWC, NSW Fisheries, DMR and NPWS throughout the preparation process and take their views into account;
  - (ii) update geological data (ie geological structures, seam thickness, coal quality) based on current knowledge:
  - (iii) review, and if necessary update, the mine plan based on current geological knowledge;
  - (iv) review and revise as necessary, subsidence predictions taking into account the results of any relevant subsidence monitoring that has been undertaken;
  - review, based on information available at the time, the potential impacts of the proposed mining on ecologically sensitive areas, archaeological resources, surface structures, and water loss to the mine workings and, take these into consideration in any refinement of the mine plan and design of appropriate mitigation measures;
  - (vi) provide a description of the proposed area to be impacted by the longwall;
  - (vii) an assessment of the likely impacts of subsidence;
  - (viii) details of proposed surface and groundwater management;
  - (ix) details of options to appropriately minimise impacts from subsidence:
  - (x) describe the physical landforms and environment of the area, including, but not limited to, watercourses, aguifers and archaeological sites:
  - (xi) details of the surface infrastructure that may be subject to subsidence and the proposed measures to ensure impact upon them is minimised as far as practicable;
  - (xii) comprehensive subsidence predictions, taking into account the results of any relevant previous subsidence monitoring undertaken;
  - (xiii) develop and provide technical details and evidence of feasible mitigation measures that can be implemented to reduce subsidence impacts.

### 3.3.3. Longwall Subsidence Monitoring

The Applicant shall undertake a detailed and ongoing monitoring program of subsidence resulting from mining to the satisfaction of the Director-General and DMR, and in consultation with DLWC and NSW Fisheries throughout the life of the mine and for a period of at least five years after the completion of mining, or other such period as determined by the Director-General in consultation with DLWC and DMR. Monitoring shall include the following:

- (i) a survey of affected stream channel systems, including monitoring of rainfall, surface and near surface water flows, water ponding and water quality.;
- (ii) monitoring of groundwater levels and quality;
- (iii) monitoring of land slips and slides; and
- (iv) a comparison of predicted impacts with actual impacts, including mapping of subsidence profiles.

The Applicant shall include information on monitoring conducted and the interpreted results in the AEMR. In this regard the AEMR shall discuss the effectiveness of mitigation and remedial measures.

#### 3.3.4. Notification of Landowners

- (a). The Applicant shall notify each relevant landowner in writing:
  - (i) of its intention to commence development headings under a property. Such notification is to be made at least 14 days prior to commencement of such works; and
  - (ii) of its intention to proceed with an application in accordance with s138 of the Coal Mine Regulation Act, 1982. Such notification is to be made at least one month prior to an application under s138 of the Coal Mine Regulation Act 1982 for land within CL224, CL 372 and ML 1328 not owned or under licence to the Applicant.
- (b). The notification referred to in subclause (a) shall provide a timetable and information on at least the following:
  - (i) landowner consultation arrangements;
  - (ii) the proposed mine plan;
  - (iii) arrangements for consultation in preparing a Property Subsidence Management Plan;
  - (iv) landowner rights under law and the conditions of this development consent; and
  - (v) offers of assistance from the Applicant to meet reasonable landowner legal and associated costs for reaching property agreement and valuations (if required).

#### 3.3.5. Subsidence Effects

- (a) The Applicant shall ensure that within a reasonable time any impact due to surface subsidence within the Crown road system is restored and safeguarded to the extent that public access is not unreasonably compromised.
- (b) The Applicant must monitor and remediate any erosion or provide stabilising structures in any areas that have significant risk of destabilisation occurring as a result of Secondary Workings, in accordance with DLWC guidelines, to the satisfaction of DLWC, for any streams that are affected by subsidence.

#### 3.4 Heritage Assessment, Management and Monitoring

#### Assessment and Management

- (a). The Applicant shall prior to the commencement of Secondary Workings prepare an Archaeology and Cultural Management Plan for the Beltana No. 1 project area to consider Aboriginal cultural and European heritage issues (where relevant). The Plan shall be prepared in consultation with the relevant Aboriginal community group(s), DMR, NPWS and NSW Heritage, and to the satisfaction of the Director-General. The Plan shall include but not be limited to:
- (i). identification and management of all areas of conservation within the project area,
- (ii). provision of management strategies for all parts of the DA area not affected by mining;
- (iii). guidance to mining personnel about the management of cultural heritage values within the mining

- area, both for known sites and sites that may be encountered during the course of Mining Operations; (iv).

  1 measures for the ongoing management of conservation areas identified in the EIS as BMU1 and part of BMU2. These management measures shall be in accordance with those measures detailed in Appendix 7 of the EIS, and may include:
  - erection of fencing around the site (identified as BMU1 and a portion of BMU2) to remove
    the risk to the site and its immediate landscape context. This fence is to be erected prior to
    the commencement of Secondary Workings beneath this area;
  - the enclosure of the site (identified as BMU1 and a portion of BMU2) shall be within an
    area of at least 1 hectare, and will include areas on both banks of the Creek and a part of
    the Casuarina stand along the banks in order to protect the visual context of the site, in
    general accordance with Figure 9.3, Appendix 7 of the EIS;
  - induction for contractors likely to be working in the vicinity of the of BMU1 and its conserved context area;
  - provision of access to the site for the relevant Aboriginal community group(s).
- (iv). management of parts of the project area where known Aboriginal sites are not expected to be directly impacted by subsidence or mitigation works;
- (v). general land management issues to protect cultural heritage values;
- (vi). protocol for rehabilitation of subsidence cracks in areas not covered by Consent to Destroy;
- (vii). access and induction issues; and
- (viii). long term rehabilitation of the creek line and cultural heritage values by measures in accordance with the stream remediation plan and, if agreed by the relevant Aboriginal community group(s), redistribution of artefacts within the remediated area, following completion of mining.
- (ix). details of protective measures for the following sites as identified in the EIS, as follows: BMU12, 13, 14, 15, 16, 17, 18, 20 and 21
- (b). <sup>2</sup>Scientific salvage is to be undertaken at the known sites in accordance with a research design to be developed when Section 90 consents are sought for those sites.
- (c). The Applicant shall obtain a NPWS Consent to Destroy (with Salvage collection and/ or grader scrape investigations) from the NPWS Director-General prior to any surface remediation works associated with longwall mining works associated with the destruction and/or interference of the Aboriginal sites identified as part of BMU2, 3, 4, 8, 9, 10, 11 and 19. Written endorsement from the relevant Aboriginal group(s) shall be obtained by the Applicant to be submitted with the NPWS Consent to Destroy (with Salvage collection and/ or grader scrape investigations) for these sites.
- (d). <sup>3</sup> The Applicant shall obtain a NPWS Consent to Destroy (without Salvage) from the NPWS Director-General prior to any works associated with the destruction and/or interference of the Aboriginal site identified as BMU5, BMU6 and BMU7. Written endorsement from the relevant Aboriginal community group(s) shall be obtained by the Applicant to be submitted with the NPWS Consent to Destroy (without Salvage) for these sites.
- (e). The Applicant is to consult regularly with the relevant Aboriginal community group(s) using consultation principles and strategies consistent with those outlined in the "Guidelines for best practice community consultation in the NSW Mining and Extractive Industries". The results of these consultations shall be documented in the AEMR.
- (f). If, during the course of construction of any surface facilities, mining activities and subsidence remediation, the Applicant becomes aware of any heritage or archaeological material not previously identified or covered by the above mentioned Consents to Destroy, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course if action prior to recommencement of work. The relevant authorities may include NPWS, the NSW Heritage

<sup>&</sup>lt;sup>1</sup>NPWS General Terms of Approval

<sup>&</sup>lt;sup>2</sup>NPWS General Terms of Approval

<sup>&</sup>lt;sup>3</sup>NPWS General Terms of Approval

Office, and the relevant local Aboriginal community. Any necessary permits or consents shall be obtained and complied with prior to commencement of work.

**Note**: Any proposed works that will affect non-indigenous heritage items will require an approval under section 139 of the Heritage Act 1977 and an application for an excavation permit to disturb the relics. This may also require additional approvals from SSC if the items are listed on the Heritage Schedule of the Local Environmental Plan.

### 3.5. Flora and Fauna Assessment, Management and Monitoring

### 3.5.1. Assessment and Management

- (a). The Applicant shall prior to commencement of Secondary Workings, prepare or review and update as necessary the existing Flora and Fauna Management Plan for the Bulga complex to address and manage the flora and fauna issues associated with the Beltana No. 1 Mine. The Plan is specifically required to outline procedures for clearing or disturbing vegetation and other habitat types, along with measures for habitat reinstatement and management.
- (b). The Flora and Fauna Management Plan shall be prepared, or the existing plan for the Bulga Complex shall be reviewed and updated as necessary, in consultation with NPWS and DMR, and to the satisfaction of the Director-General. The Plan shall include but not be limited to:
  - (i) details of strategic vegetation management, outlining timeframes for clearing and re-vegetation activities and a map illustrating the Plan. The Plan should aim to maximise scope for new vegetation to establish and restore ecological integrity;
  - (ii) details of the schedule for clearing activities incorporating seasonal habitat requirements for species such as bats and other mammals, with the objective of avoiding incidents during sensitive hibernation and breeding periods;
  - (iii) where necessary, details of methods of how medium to large tree hollows (defined as being greater than 20 centimetres in diameter) and nests removed during construction/ subsidence remediation are salvaged and replaced in adjacent vegetation; and
  - (iv) details of management measures to be applied if threatened species identified in the EIS are found on site;
  - (v) The Applicant shall identify a protocol for identifying and managing significant impacts on any threatened fauna species which have not been identified in the EIS, during construction, operation and remediation works.
- (c). The Applicant shall establish riparian and aquatic vegetation in the temporary diversion channel for the northerly flowing drainage line as identified in the EIS to provide temporary amphibian and reptile habitat during the remediation of the creek line.

### 3.5.2. Rehabilitation and remediation

The Applicant shall, to the satisfaction of the Director-General and in consultation with DLWC and DMR:

- (i). ensure that any vegetated areas cleared for construction purposes and not utilised in the Mining Operations are restored at least to its original condition.
- (ii). develop a program for vegetation rehabilitation involving re-establishment of native species, especially groundcover species, in order to prevent erosion and future degeneration of the communities.
- (iii). minimise disturbance to vegetation during the rehabilitation of areas disturbed by subsidence remediation works through the use of small equipment, where necessary.

#### 3.5.3. Maintenance

- (a). The Applicant shall during the life of the mine and until the revegetated areas are established to the satisfaction of DLWC and DMR, maintain revegetated areas. Maintenance shall include, where necessary, but not be limited to:
  - replanting failed or unsatisfactory areas
  - · repairing erosion problems
  - fire management fire suppression or fire encouragement
  - pest and weed control
  - control of feral animal populations
  - maintain and repair fencing
  - fertiliser application
  - application of lime or gypsum to control pH and improve soil structure.
- (b). As well as the requirements under subclause (i), the efforts and progress of the Flora and Fauna Management Plan (or revised plan for the Bulga Complex) shall be documented in the Annual Environmental Management Report in accordance with the Department of Mineral Resource's Guidelines to the Mining, Rehabilitation and Environmental Management Process (March 1998) or its latest version.

### 3.5.4. Monitoring

- (a) The restoration works shall be monitored by the environmental officer. The results of the monitoring and the effectiveness of the restoration shall be reported as part of the Annual Environmental Management Report.
- (b) The Applicant shall prepare a detailed monitoring program for habitat areas within the DA area, including any aquatic habitats, during the development and for a period after the completion of the development to be determined by the Director-General in consultation with NPWS and DMR. The monitoring program shall be included in the Flora and Fauna Management Plan (Condition 3.5.1) 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 and DMR as a result of the monitoring, and
  - 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.

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

### 3.6 Soil Management

- (a) The Applicant shall prepare an Erosion and Sediment Control Plan or review and update the existing Erosion and Sediment Control Plan as necessary for the for the out of pit surface facilities and areas impacted by underground mining and remediation works, in consultation with the DMR and DLWC, taking account of the DLWC "Draft Guideline for Establishment of Stable Drainage Areas on Rehabilitated Minesites" or its latest version, and to the satisfaction of DLWC and the Director-General. The Plan shall be prepared and implemented prior to the commencement of out of pit surface facilities.
- (b) The Erosion and Sediment Control Plan shall include but not be limited to:
  - (i) details of temporary and permanent erosion and sediment control systems to be used during construction, including earthworks associated with landscaping;
  - (ii) details of soil salinity management where relevant;
  - (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. 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) the consideration of the location and purpose of structures in the erosion and sediment control plan to maximise similarities between pre-development and post-development drainage networks with reference to catchment areas, drainage densities and discharge characteristics;
- (v) consideration and management of erosion and sedimentation of affected surface watercourses/ waterbodies, including creeklines within the DA areas;
- (vi) measures to construct banks, channels and similar works to divert stormwater away from disturbed areas, coal 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;
- (v). details of in channel works along the channel systems of the northerly-flowing intermittent drainage line:
- (vi.) a program for reporting on the effectiveness of the erosion and sediment control systems and performance against objectives contained in the approved Erosion and Sediment Control Management Plan, and EIS.
- (c) The Applicant shall also prepare a Stream Remediation Plan to prevent degradation occurring along the watercourses and to address any degradation which does occur. This plan shall be prepared prior to commencement of any in-channel works in the northerly flowing drainage line as identified in the EIS, to the satisfaction of DLWC. This plan shall include:
  - (i). details of methods to minimise the risk of bed fracturing as the long wall panel designs are more fully developed;
  - (ii). a remediation strategy to ensure that any bed cracking which occurs can be remediated and to
    prevent erosion of stream/ banks and beds. This strategy will require further assessment by the
    Applicant to ensure that any sealing will be sufficient to prevent significant degradation of stream
    system occurring;
  - (iii). a revegetation strategy to ensure that remediated areas are promptly revegetated with native vegetation that can withstand scour and tractive forces exerted by stream flows;
  - (iv). in channel works required along the channel system of the northerly flowing intermittent drainage line:
  - (v). rehabilitation of eroded areas adjacent to the drainage line;
  - (vi). methods to treat areas exhibiting surface scalding and tunnel erosion including ploughing, treatment with gypsum, reshaping, seeding and fertilisation areas.
  - (vii) consider the potential for rock bars to be used to assist in stabilising soils in channel, to prevent scour and entrainment of fill materials.

#### 3.7 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 DLWC. The rehabilitation shall also have regard to the *Synoptic Plan – Integrated Landscapes for Minesite Rehabilitation* (1999), for the Upper Hunter, or its latest version.

### 3.8 Visual Amenity and Landscaping

- (a). The Applicant shall revise and update the existing Landscape and Revegetation Management Plan for the Bulga Complex, to address all visual and landscaping associated with the Beltana No. 1 project. The plan is to be prepared in consultation with the SSC and approved by the Director-General prior to commencement of construction of out of pit surface facilities. In preparation of this plan, regard shall be had to the *Synoptic Plan Integrated Landscapes for Minesite Rehabilitation* (1999), for the Upper Hunter, or its latest version. The Plan shall include, but not be limited to, the following:
  - (i) an on-site landscaping strategy detailing design and proposed planting of trees and shrubs and the construction of mounding or bunding, particularly for the bund adjacent to Broke Road, landscaping of areas around the out of pit surface facilities and at any other areas identified as necessary by SSC for the maintenance of satisfactory visual amenity, and as agreed by the Director-General;

- (ii) appropriate erosion control and sediment control practices for earthworks associated with the landscaping:
- (iii) details of visual appearance of any buildings, structures, facilities or works (including paint colours and specifications). Buildings and structures shall be designed and constructed/ renovated so as to present a neat and orderly appearance, to blend as far as practicable with the surrounding landscape and to minimise visual impact. Particular attention should be given to the transfer conveyor, dewatering bores and potential gas drainage plant;
- (iv) details, specifications and staged work programs to be undertaken, maintenance of all landscape works and maintenance of building materials and cladding; and
- (vi) use of endemic species for rehabilitation.
- (b) In the event that a landowner considers that the visual impacts from the proposal once operational are adversely greater than that predicted in the EIS at their dwelling, the Applicant shall, upon the receipt of a written request, consult the landowner, discuss their concerns and the level of impact compared to EIS predictions, and, in the case of impact adversely greater than the EIS predictions, possible mitigation measures.
- (c) Should the Applicant and / or landowner dispute the level of adverse impact or any proposed mitigation measures from subclause (b) above, then either party may refer the matter to the Director-General in consultation with SSC. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process. The decision of the Independent Dispute Resolution Process shall be final, as agreed by the Director-General.

#### 3.9 Bushfire and other Fire Controls

The Applicant shall:

- (i). provide adequate 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;
- (ii). prior to commencement of Mining Operations prepare or review and update as necessary the existing Bushfire Management Plan for Bulga Complex, to the satisfaction of SSC and the Rural Fire Service, for all its holdings contained in the Beltana No. 1 DA.

### 3.10. Land Management

- (a) The Applicant shall, prior to commencement of Secondary Workings review and update the existing Land Management Plan for the Bulga Complex 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, SSC and DMR, and to the satisfaction of the Director-General. The plan shall include, but not be limited to:
  - (i) pastures and remnant vegetation management;
  - (ii) prevention and rehabilitation of land degradation;
  - (iii) eradication of vermin and noxious weeds as required by the Rural Lands Protection Board, and the Prickly Pear Authority and other relevant authorities;
  - (iv) feral animal control.
- (b) The Applicant shall as far as practicable minimise the removal of trees and other vegetation from the proposed surface facilities/ subsidence remediation areas, and restrict any clearance to the areas occupied by mine activity, buildings and paved surfaces, surface remediation works, and those areas necessary for fire control in accordance with SSC requirements.

### 4. Water Management and Monitoring

### 4.1 Surface & Ground Water Management Plans

The Applicant shall:

- (a). Prior to the commencement of Secondary Workings prepare, or review and update as necessary, the existing Site Water Management Plan for the DA area, in consultation with DLWC, SSC and DMR and to the satisfaction of the Director-General and DLWC, which shall include, but not be limited to, the following matters:
  - (i) management of the quality and quantity of surface and groundwater within the areas covered by the water management plans;
  - (ii) management of stormwater and general surface run-off diversion to ensure separate effective management of clean and dirty water. This shall include a consideration of the separation of heavily contaminated waters including those containing oil, grease or other pollutants and for the containment of sediment laden run-off from around the surface facilities and mine water from the workings;
  - (iii) measures to prevent the degradation of downstream surface water quality, due to Mining Operations, below a criteria to be determined in consultation with and to the satisfaction of DLWC, particularly in the unnamed creeks and ephemeral watercourses in the area;
  - (iv) contingency plans for managing adverse impacts of the development on surface and groundwater quality;
  - (v) demonstration of the robustness of the mine water circuit to handle additional inflows of water to the pit;
  - (vi) details of any discharge arrangements and any requirements to modify the volume of storages on site;
  - (vii) measures to ensure that poorer quality class waters are effectively reused on the site, where practicable, including consideration of segregation of waters based on salinity classes and other levels of contamination;
  - (viii) details of a strategy for the decommissioning of water management structures:
  - (ix) details of design and maintenance of all storages, diversion bank, transmission channels and sedimentation basins for the site, to minimise sedimentation of watercourses;
  - (x) details of the sequential in-filling of the existing northerly-flowing drainage channel;
  - (xi) details of the reinstatement of the northerly-flowing drainage channel at the completion of mining;
  - (xii) details of any licensing requirements for any extractions, storages, or other constructions on the site;
  - (xiii) projection of potential groundwater changes during mining (short term) and post-mining (long term) with particular attention given to the effect of changes to groundwater quality and mobilisation of salts;
  - (xiv) 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;

- (xv) <sup>4</sup>details on how groundwater works comply with any operating regional water management plans issued by DLWC; and
- the remediation or replacement of any farm water supply on private land which is lost as a result of (xvi) mining activities.

#### (b).5The Applicant shall:

- obtain a permit under Part 3A of the Rivers and Foreshores Improvement Act 1948 for works within forty metres of a river as defined under the Act, prior to commencing any works for which the Approval is required.
- (ii). identify all works likely to intercept the groundwater table, and obtain a licence from DLWC in respect of:
  - all bore and wells which intersect the groundwater table, including monitoring bores; and
  - excavations which intersect the groundwater table.
- (c). The Applicant shall ensure that the operation shall not have an unacceptable impact on the beneficial use of the groundwater. This includes the protection of groundwater quality, quantity and groundwater dependant ecosystems.
- (d). 6All works are to be designed and constructed to be compatible with the pre-existing natural ecosystem giving appropriate consideration to local hydrology, geomorphology, soils and vegetation, native animals and other biota.
- (e). The Applicant shall ensure, to the satisfaction of DLWC, that the works associated with the proposal shall not damage or interfere in any way with:
  - (i). vegetation outside the area of operation
  - (ii). the physical stability of the site or any nearby or contiguous watercourse, riparian or wetland areas, or
  - (iii). the quality of the surface water at the site or water in any nearby or contiguous watercourse, riparian or wetland areas.
- (f). 8The Applicant shall be responsible for the stabilisation and progressive rehabilitation of the works and all areas affected by those works, to the satisfaction of DLWC. The primary objective of these works is initially the rapid establishment of suitable vegetative cover to control erosion and sedimentation and subsequently the progressive establishment of a dominance of appropriate endemic native plant species to provide long term stability.
- (g). 9The Applicant shall be responsible for any excavation, removal or deposition of soil/ sand/ gravel/ rock/ trees or other materials undertaken by any person within the Development Application Area with respect to any activities associated with this DA and/ or consent.
- (h). <sup>10</sup>The Applicant shall undertake restoration of water quality when the remedial action fails or monitoring results identify failure of management strategies, to the satisfaction of DLWC. In these cases, beneficial use of aguifer/s should be restored to a condition equivalent or better to that of pre-mining conditions.

#### (i).Pollution of waters

The Applicant shall:

(i). 11 not discharge any water extracted from the works into any watercourse or source of groundwater unless it meets the requirements of the Protection of the Environment Operations Act;

<sup>&</sup>lt;sup>4</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>5</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>6</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>7</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>8</sup>DLWC General Terms of Approval

<sup>&</sup>lt;sup>9</sup> DLWC General Terms of Approval <sup>10</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>11</sup>DLWC General Terms of Approval

- (ii). <sup>12</sup>ensure, to the satisfaction of DLWC, that no discharge waters adversely affect any neighbouring property;
- (iii). <sup>13</sup>ensure, to the satisfaction of DLWC, that any displaced soil, rock, vegetation or other material is to be located and made secure so that it cannot pollute surface water;
- (iv). <sup>14</sup>make suitable provision to the satisfaction of DLWC to prevent tailings or other materials from being washed into watercourses.

### (i). Mine Water

The mine water balance shall be recalculated on six-monthly and annual intervals to assess:

- i. whether climatic conditions and inflows to the mine are having a significant impact on mine water make, storage and discharge requirements;
- ii. address issues of additional storage which may be necessary to cope with the increased water make into the water circuit of the mine. This resegregation of water within the water circuit to reuse highly contaminated water prior to use of fresh water from the Hunter River on site, where practicable.

The recalculated water balances shall be reported in the AEMR.

### (k). Rehabilitation

The Applicant shall re-establish a post-mining drainage system incorporating each drainage line discharging from the area of the mining development. The drainage system shall be comparable to the drainage density of the pre-mining land. The design and implementation of the post-mining drainage system is to be to DLWC standard.

### 4.2 Surface and Groundwater Monitoring

The Applicant shall:

- (i). The Applicant shall extend the existing Bulga Complex surface and groundwater monitoring program, in consultation with DLWC, to include additional monitoring bores/ positions for the Beltana No. 1 project, as necessary. This monitoring program shall include:
- the establishment of a groundwater monitoring program to establish background water quality and assess short and long term environmental impact associated with the Mining Operations and other associated groundwater works. The monitoring program shall satisfy the requirements of DLWC and shall be reviewed annually.
- prepare a detailed monitoring program in respect of surface water quality and quantity, including water in and around the DA area during mining works and post mine operations. The program shall be developed in consultation with DLWC, and to the satisfaction of the Director-General and DLWC.
- (ii) The Applicant shall incorporate into the Site Water Management Plan details of the monitoring program for both surface water and groundwater. The monitoring program shall include: the duration (pre, during and post mining); sites to be sampled; frequency of sampling; the parameters to be measured (including but not limited to the location and depths of aquifers and any groundwater-dependent ecosystems); the depth of bore construction; the need for any contingency plans; the analysis of data and the reporting procedure; and determination of appropriate cut-off criteria for monitoring purposes determined in consultation with DLWC. The results of the monitoring program shall be reported in the AEMR. The post-mining monitoring program shall be prepared no later than one year prior to the cessation of mine operations.
- (iii) The monitoring program shall have the capacity to collect sufficient data to adequately assess:
  - the impact of any licensed groundwater extraction on groundwater levels on neighbouring properties and in the locality, and to identify any water quality impacts;
  - any licensing requirements associated with the monitoring works;
  - 15if any capture of alluvial groundwater is occurring into the mine workings, and the extent of the cone of depressurisation surrounding the mine;

<sup>13</sup> DLWC General Terms of Approval

<sup>&</sup>lt;sup>12</sup>DLWC General Terms of Approval

<sup>&</sup>lt;sup>14</sup>DLWC General Terms of Approval

- potential adverse impacts or degradation of the groundwater systems through the development of a contingency program with identified stages of implementation; and
- any concerns or complaints from surrounding landholders on groundwater matters, and any ensuring actions, which shall be maintained and be available to DLWC.

#### 5. Waste

(a) The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

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.

- (b) (i). The Applicant shall reuse, recycle or dispose of all waste (including but not limited to solid waste, liquid waste and putrescible matter) from the site to the satisfaction of SSC or EPA, as relevant.
  - (ii). The Applicant shall dispose of all solid waste and putrescible matter from the sites to the satisfaction of SSC or EPA, as relevant.
  - (iii). The Applicant shall dispose of all treated sewage and sullage to the satisfaction of SSC in accordance with the EPA License.
- (c). Prior to the commencement of Secondary Workings the Applicant shall prepare or review and update as necessary the existing Waste Management Plan for the DA area in consultation with SSC and to the satisfaction of the Director-General. The Plan shall include but not be limited to:
  - i. details of measures to facilitate waste management on site;
  - ii. details of compliance with the Applicant's obligations under the Protection of the Environment Operations Act (1997):
  - iii. identification of all types and quantities of waste materials produced at the mine site during construction, commissioning and operation;
  - iv. programs aimed at minimising production of waste at the mine site through the implementation of operational and management measures;
  - v. details of the potential reuse and recycling avenues for waste materials produced at the mine site, including collection and handling procedure;
  - vi. details of appropriate disposal routes in the event that reuse and recycling avenues are not available or are not practicable; and
  - vii. programs for involving and encouraging employees and contractors to minimise waste production at the mine site and reuse/ recycling where appropriate

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<sup>&</sup>lt;sup>15</sup> DLWC General Terms of Approval

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

### 6.1. Air Quality Management and Monitoring

### 6.1.1. Air Quality Standards/Goals

The Applicant shall manage the Beltana No.1 mine so as to satisfy the relevant EPA air quality criteria for dust deposition and dust concentration. In accordance with the modelling and assessment presented in Section 6.3.3 of the EIS, these criteria apply for the cumulative impacts of the Bulga Complex, including the Beltana No. 1 mine. The relevant criteria are contained in Table 1 and Table 2 below.

 Table 1.
 Health Based Air Quality Criteria for Particulate Matter Concentrations

Pollutant	Standard/Goal	Agency
Total Suspended Particulate Matter (TSP)	90μg/m³ (annual mean)	NH&MRC
Particulate matter < 10μg (PM <sub>10</sub> )	150μg/m³ (average of 99th percentile of 24 hour averages over three years)	US EPA
	50μg/m³ (annual mean)	US EPA

Table 2. NSW EPA Amenity Based Criteria for Dust Fallout

Existing Dust Fallout Level (g/m²/month)	Maximum Acceptable Increase Over Existing Fallout Levels (g/m²/month)	
	Residential	Other
2	2	2
3	1	2
4	0	1

## 6.1.2. <u>Dust Management Plan</u>

The Applicant shall, prior to the commencement of construction of out of pit surface facilities prepare or review and update the existing Dust Management Plan for the Bulga Complex to address and manage the dust impacts generated by, or associated with, the Beltana No. 1 mine. This plan shall detail air quality safeguards and procedures for dealing with dust emissions from the construction and operation of the Beltana No.1 mine to the satisfaction of the Director-General. The Plan shall be prepared in consultation with the SSC and EPA and shall be updated as required by the Director-General. The Plan shall include, but not be limited to, details of:

- (i) the identification of properties which will be affected by dust generated by the mine in accordance with the criteria detailed in condition 6.1.1;
- (ii) specifications of the procedures for the dust monitoring program for the purpose of undertaking independent dust investigations;
- (iii) outline the procedure to notify property owners and occupiers as identified in the EIS or by monitoring as likely to be affected by dust generated by the mine in excess of criteria detailed in condition 6.1.1;
- (iv) mitigation measures to be employed to minimise dust emissions during both the construction and operation phases;
- (v) the use of the existing protocol for handling dust complaints that include recording, reporting and acting on complaints;
- (vi) outline of response and/or management measures to be undertaken in the event of complaints from a landowner where dust levels are demonstrated, in accordance with Condition 6.1.3, to be below the dust criteria in condition 6.1.1;

- (vii) appropriate mechanisms for community consultation;
- (viii) outlining proactive/predictive and reactive mitigation measures to be employed to minimise dust emissions including visible dust emanating from the site;
- (ix) equipment to be available and used to control dust generation;
- (x) methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions, particularly from surface activities;
- (xi) details of locations and frequency of existing dust monitoring and deposition gauges at the residential areas as agreed by the Director-General;
- (xii) a program to continue baseline monitoring undertaken prior to development consent;
- (xiii). a program to undertake ambient monitoring of TSP concentrations and dust deposition rates at nearest sensitive receptors;
- (xiv). measures to manage and mitigate short term episodic events including investigations into the relationships between short-term variations in dust levels (particularly TSP and dust deposition) and levels of complaints and annoyance, with a view to reviewing the monitoring approaches; and
- (xvi). as far as practicable details of the interrelationships of this plan with the dust management plans for Mt Thorley Operations and Warkworth mine.

### 6.1.3. Air Quality and Dust Monitoring

- (a) The Applicant shall:
  - (i) undertake monitoring at locations described in the Dust Management Plan (refer to Condition 6.1.2);
  - (ii) monitor and report against the NSW EPA goals of 50ug/m³ (24-hour average) and 30ug/m³ (annual mean). The results of this monitoring and reporting are to be incorporated into the AEMR;
  - (iv) establish in consultation with the EPA, dust deposition and TSP matter monitoring sites. The sampling method, units of measure, interval and frequency of monitoring will be as set out in the *Approved Methods for sampling and analysis of Air Pollutants in NSW*;
  - (iv) include sites, which may incorporate existing monitoring locations for the Bulga Complex, for monitoring impacts of dust at the nearest non-mine owned residences and locations as may be determined to be necessary by the Director-General and in accordance with the Dust Management Plan referred to in Condition 6.1(a):
  - (v). provide reporting once every six months on the performance of the control measures and of the monitoring system detailed in the EIS and conditions of this consent, unless otherwise agreed by the Director-General. The reports shall be provided to the Director-General, CCC and SSC within seven days of completion of the report; and
  - (vi) provide all results and analysis of air quality monitoring in the AEMR including a determination of the dust deposition rate in g/m²/month, which shall be plotted in the AEMR.
- (b) In the event that a landowner or occupier considers that dust from Beltana No 1 at his/her dwelling or over more than 25% of his/her vacant land is due to emissions from Beltana No 1 is in excess of the criteria detailed in Tables 1 and 2 above, and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request from the landholder:
  - (i) consult with the landowner or occupant affected to determine his/her concerns;
  - (ii) after consulting as far as reasonably practicable with the other mines in the vicinity, including the Bulga Open Cut, South Bulga Colliery, Mt Thorley Operations and Warkworth mine, make arrangements for, and bear the costs of appropriate independent dust investigations in accordance with the Dust Management Plan, and to the satisfaction of the Director-General, to quantify the impact and determine, as far as practicable the source of the effect and contribution of the Beltana No. 1 mine;

- (iii) modify the mining activity or take other steps in accordance with the Dust Management Plan if exceedences are demonstrated by the independent investigations to result in part from Beltana No 1 mine related activity. This may include:
  - introduction of additional controls, either of dust generation from individual sources on the site or on site operations, or modify operations to attempt to ensure that the dust criteria are achieved; and/or;
  - 2) negotiate, as far as reasonably practicable, an agreement with the landowner or provide such forms of benefit or amelioration of the impact of dust as may be agreed between the parties as providing acceptable compensation for the dust levels experienced.
- (iv) conduct follow up investigation(s) to the satisfaction of the Director-General, where necessary.

**Note:** Vacant land in this condition means the whole of the lot in a current plan registered at the Land Titles Office as at the date of this consent that does not have a dwelling situated on the lot and is permitted to have a dwelling on that lot.

- (c) If the independent dust investigations in sub-clause (b) above confirm that dust levels from the Beltana No. 1 mine alone are in excess of the relevant criteria detailed in Tables 1 and 2 above, and if the measures in sub-clause (b)(iii) (1) above do not reduce the dust levels below the criteria in Tables 1 and 2, or if agreement in accordance with sub-clause (b)(iii) (2) above cannot be reached, 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.
- (d) If the independent dust investigations in sub clause (b) above confirm that other mining activity in the vicinity of the project and the Beltana No. 1 mine are contributing to the cumulative dust levels in excess of the criteria as described in sub-clause (c) above, the Applicant shall contribute to the purchase of an affected property at the written request of the landholder, in accordance with the Joint Acquisition Management Plan (refer to condition 11.3).
- (e) Further independent investigation(s) shall cease if the Director-General is satisfied that the relevant criteria in Tables 1 and 2 are not being exceeded and are unlikely to be exceeded in the future.
- (f) Monitoring for the concentration of a pollutant emitted to the air required to be conducted by a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with:
  - any methodology which is required by or under the *Protection of the Environment Operations Act* 1997 to be used for the testing of the concentration of the pollutant;
  - if no such requirement is imposed by or under the *Protection of the Environment Operations Act* 1997, any methodology which the condition of the licence or the protocol (as the case may be) requires to be used for that testing; or
  - if no such requirement is imposed by or under the *Protection of the Environment Operations Act* 1997 or by a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

### 6.2. Dust Suppression and Control

- (a) The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the DA area following the completion of mining and associated activities in that area to minimise the generation of wind blown dust.
- (b) Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

#### 6.3 **Noise Control**

#### 6.3.1 Noise Criteria

<sup>16</sup>The Applicant shall ensure that noise emissions from the operation of the premises must not exceed the noise limits in Table 3 below at the nominated residences.

Table 3. Noise Criteria for the Bulga Complex, including the Beltana No. 1 project.

Residential location	Daytime - L <sub>A10</sub> dB(A)	Night time - L <sub>A10</sub> dB(A)
Myers	43	37
McInereney	43	37
Lewis	43	39
Dawtry	39	39

- Notes: 1. These limits apply to the noise generated from operations at the Bulga Complex, including the Beltana No. 1 mine;
  - 2. The limits in the Table 3 apply in wind conditions of 0 to 3 metres per second at a height of 10 metres above surface level, and/ or temperature inversions of up to 4°C per 100 metres.

#### 6.3.2. Area of Affectation

The area of noise affectation during Mining Operations is defined by demonstrated exceedence of noise levels at any non-mined owned dwellings shown in Table 4 below.

Table 4. Noise Affectation levels

Time	Non-adverse	Adverse
Day	40 dB(A) L <sub>A10</sub>	45 dB(A) L <sub>A10</sub>
Night	35 dB(A) L <sub>A10</sub>	40 dB(A) L <sub>A10</sub>

#### 6.3.3. Request for independent monitoring and acquisition

#### (a). Monitoring and management

In the event that a landowner or occupier of a non-mined owned property considers that noise from the Beltana project is in excess of:

- the noise levels depicted in Tables 3 or 4 above; or
- that a landowner considers that the noise level(s) depicted in Table 4 is being exceeded over more than 25% of his/her vacant land,

and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request from the landowner:

- consult with the landowner or occupants affected to determine their concerns; i.
- make arrangements for, and bear the costs of, following consultation as far as reasonably ii. practicable with other mine operations in the vicinity where necessary, appropriate independent noise investigations in accordance with the Noise Management Plan to the satisfaction of the Director-General, to quantify the impact and determine the source of the effect and the contribution of the Beltana No. 1 mine to the effect:
- iii. modify the mining activity in accordance with a noise reduction plan prepared as part of the Noise Management Plan, if exceedence are demonstrated by the investigation to result in part from the mine related activity. This shall include:

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<sup>&</sup>lt;sup>16</sup> EPA General Terms of Approval

- introduction of additional controls, either on noise emission from individual sources on the site or on site operations or modify operations, to ensure that the criteria in Table 3 are achieved;
- seek agreement of the landowner, and in the case of the cumulative impacts the other relevant Mining Operations, to undertake noise mitigation measures at the dwelling to achieve the acceptable internal noise levels;
- seek agreement of the landowner, and in the case of cumulative impacts with the other relevant Mining Operations in the area and the landowner, to provide such other forms of benefit or amelioration of the impacts of noise as may be agreed between the parties as providing acceptable compensation for the noise levels experienced.
- iv. conduct follow up investigations to the satisfaction of the Director-General, where necessary.

### (b). Acquisition

If the independent noise investigation(s) in sub clause (a) above confirm that noise limits in Table 4 are being exceeded by Beltana No 1 alone, and the measures in Condition 6.3.3 (a)(iii) do not reduce the levels below the criteria in Table 4, the Applicant shall at the written request of the landowner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in condition 11.1.

In the case of cumulative levels, including a contribution from Beltana No. 1 mine, in excess of the criteria in Table 4, the Applicant shall contribute to the purchase of the affected property in accordance with the Joint Acquisition Management Plan pursuant to Condition 11.3.

- (c). If continued complaints and noise investigation confirm that noise levels in Table 3 are being exceeded as a result of the contribution from Beltana No. 1 mine, but are less than the noise limits in Table 4, the Applicant shall negotiate with the landowner until a resolution to the satisfaction of the Director-General is reached.
- (d). If a landowner disputes any noise mitigation or other measures proposed by the Applicant in accordance with sub-clause (a) above, the matter shall be referred by either the Applicant or landowner to the Director-General in consultation with SSC. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.
- (e). Further independent investigations shall cease in the Director-General is satisfied that the relevant criteria in Table 3 and 4 are not being exceeded and are unlikely to be exceeded in the future.

### 6.3.4 Noise Management Plan

- (a) The Applicant shall, prior to commencement of construction of out of pit surface facilities, revise and update the existing Noise Management Plan for the Bulga Complex (incorporating construction and operational noise which may be generated by the Beltana No.1 project), to the satisfaction of the Director-General. The EPA and SSC should also be consulted prior to the finalisation of the Management Plan. The Plan shall:
  - i) include details of the methods to be used for the continuous monitoring of noise to evaluate, assess and report the L Aeq (15 minute) and LAeq (period) noise emission levels due to the normal operations of the Beltana No. 1 mine;
  - provide details regarding operating configuration, determining survey intervals, weather conditions and seasonal variations, selecting variations, locations, periods and times of measurements;
  - iii) detail management measures where the target criteria in Table 3 of this consent are predicted to be exceeded, or are exceeded during Mining Operations. These measures should include but not be limited to:
    - The selection of representative monitoring locations within the community must be carried out in consultation with the Director-General;
    - prompt response to any community issues of concern;

- refinement of on site noise mitigation measures and mine operating procedures where practical;
- discussions with relevant property holders to assess concerns;
- consideration of acoustical mitigation at receivers; and
- consideration of negotiated agreements with property owners.
- iv) specify the procedures for a noise monitoring program for the purpose of undertaking independent noise investigations;
- v) outline the procedure to notify property owners and occupiers likely to be affected by noise from the operations;
- vi) maintain a protocol for handling noise complaints that include recording, reporting and acting on complaints, particularly where complaints are received and it is demonstrated noise levels are in excess of the criteria contained in this consent;
- vii) record appropriate mechanisms for community consultation;
- viii) outline proactive/predictive and reactive mitigation measures to be employed on the site to limit noise emissions.
- ix) outline measures to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms);
- x) develop a stockpile dozer operations protocol to incorporate the operational restrictions, described in Section 6 of the EIS.
- xi) survey and investigate noise reduction measures from plant and equipment annually, subject to noise monitoring results and/or complaints received, and report in the AEMR at the conclusion of the first 12 months of Mining Operations and set targets for noise reduction taking into consideration valid noise complaints in the previous year; and
- xiii) as far as practicable, details of the interrelationship of this plan with the noise management plan for Mt Thorley Operations and Warkworth Mine.

#### (b) The Applicant shall also:

- i) make copies of the Noise Management Plan available to the EPA, SSC and CCC within fourteen days of approval, or as otherwise agreed to by the Director-General; and
- ii) include a summary of noise monitoring results in the AEMR.

#### 6.3.5. Noise measurements

- (a). <sup>17</sup>For the purpose of noise measurement, the LA<sub>10</sub> noise level must be measured or computed over a period of 15 minutes using "FAST" response on the sound level meter.
- (b). <sup>18</sup>For the purpose of the noise measurements referred to in Tables 3 or Table 4 above, 5dB must be added to the measured level if noise is substantially tonal or impulsive in character.

#### 6.3.6. Noise Monitoring

The level of noise emitted from the premises must be monitored in accordance with the existing noise monitoring program.

#### 6.4 Lighting Emissions

- (a) The Applicant shall screen or direct all on-site lighting away from residences and roadways to the satisfaction of SSC.
- (b) The Applicant shall, prior to commencement of construction of the out of pit facilities, prepare or revise and update as necessary the existing Lighting Management Plan for the Bulga Complex to include any additional lighting requirements/ characteristics required for the Beltana No. 1 project.

<sup>&</sup>lt;sup>17</sup>EPA General terms of Approval

<sup>&</sup>lt;sup>18</sup>EPA General Terms of Approval

The Plan is to be revised to the satisfaction of the Director-General and in consultation with SSC, outlining details of the proposed process and measures to address complaints that may be received from residents or road users impacted by lighting from the mine site and details of measures to minimise light emissions.

(c) The Applicant shall report on the effectiveness of the lighting emission controls in the AEMR.

### 6.5 Blasting

The Applicant shall not undertake any blasting activities associated with the Beltana No.1 mine.

## 7. Transport and Utilities

### 7.1 Road Transport

No coal shall be hauled from the mine site along public roads, except under emergency circumstances and with the prior approval of the Director-General and SSC.

#### 7.2. Road Requirements

<sup>19</sup>Prior to commencement of any construction works within a public road reserve the Applicant shall:

- (a) establish road surveillance and maintenance programs for the affected roads to the satisfaction of SSC; and
- (b) obtain from Council the following approvals under the Roads Act,
  - (i). Broke Road Permit to work in Road reserve;
  - (ii). Charlton Road Permit to work in Road Reserve and
  - (iii). Cobcroft Road Permit to work in Road Reserve.

### 7.3. Submission of Engineering Plans for Roadworks

<sup>20</sup>The Applicant shall submit three (3) copies of engineering plans and specifications to Council for approval under the Roads Act, prior to commencement of construction works. The plans are to be drawn to Council's Development Design and Construction Specifications and are to provide for the following works as generally described in the EIS (where applicable):

- Broke Road
- Construction of the conveyor under Broke Road

#### 7.4. Road construction

- (a). <sup>21</sup>The Applicant shall construct Broke Road in accordance with the design specifications approved under the provisions of condition 7.3.
- (b). Prior to commencement of Construction, the Applicant shall ensure that the intersection of the mine's access road with Broke Road is constructed to the satisfaction of SSC.

### 7.5. Road Monitoring, Maintenance and Rehabilitation

- (i). <sup>22</sup> The Applicant shall monitor the road pavement of the roads affected by subsidence to determine settlement, readability, surface cracking and collapse, and provide monitoring records to Council. The format and frequency of reporting shall be subject to the agreement of Council.
- (ii). <sup>23</sup>The Applicant shall maintain the affected roads for a period of four (4) years from the commencement of subsidence impacts and carry out repairs and maintenance in accordance with the approved plans required by the above Condition.
- (iii.) <sup>24</sup> In the event that roads cannot be repaired to Council's reasonable requirements following the impacts of subsidence, the Applicant shall rebuild the roads (or sections of roads) to Councils standards.

<sup>&</sup>lt;sup>19</sup> SSC General Term of Approval

<sup>&</sup>lt;sup>20</sup> SSC General Terms of Approval

<sup>&</sup>lt;sup>21</sup> SSC General Terms of Approval

<sup>&</sup>lt;sup>22</sup> SSC General Terms of Approval

<sup>&</sup>lt;sup>23</sup> SSC General terms of Approval

<sup>&</sup>lt;sup>24</sup> SSC General Terms of Approval

#### 7.6 Road Work Schedule

The Applicant shall notify SSC and residents using the road of the schedule of road works and disruptions to road usage, at least 24 hours prior to the scheduled road works or disruption to road usage.

#### 7.7 Road closures

The Applicant shall prepare a Public Road Management Plan to the satisfaction of the Director-General, and in consultation with SSC and RTA for any roads works which may be required for Cobcroft, Charlton and Broke Roads. The Plan shall include, but not be limited to, the following matters:

- (i) details of the proposed safety management measures during the period of public road works;
- (ii) methods for ensuring the safety of road users and the general public;
- (iii) strategies for informing road users and the local community of any proposed road closure;
- (iv). details of the procedures for permitting the passage of emergency vehicles during any road closure. This shall also include details of the proposed methods for sufficiently notifying emergency service providers of the proposed times and period of the road closures;
- (v). details of the disruptions that are likely to occur during the closure period.

### 7.8 Development Supervision Fee

<sup>25</sup> The Applicant shall pay the relevant road work supervision fee based on the 2001/02 adopted rate of \$126.50 per hour (or part thereof). An invoice for such a fee shall be issued upon completion of relevant supervision work.

### 7.9 Provision of Utility Services

In preparing the Mining Operations Plan (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. Particular reference should be given to fibre optic and copper cable telecommunications, State Survey Marks, Permanent Marks and Trig Points.

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<sup>&</sup>lt;sup>25</sup> SSC General Terms of Approval

### 8. Monitoring/Auditing

- (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 and Applicant, require the monitoring programs in Conditions 3, 4 and 6 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 SSC within two weeks of approval of the relevant government authority.
- (b) All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/quality control plan and shall be included in the relevant environmental management plan. Only accredited laboratories shall be used for laboratory analysis.

### 8.1 Third Party Monitoring / Auditing

### **Independent Environmental Auditing**

- (a) Every three years from the date of this consent until completion of mining in the DA area, or as otherwise directed by the Director-General, the Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with ISO 14010 Guidelines and General Principles for Environmental Auditing, and ISO 14011 Procedures for Environmental Auditing (or the current versions), and in accordance with any specifications required by the Director-General. Copies of the report shall be submitted by the Applicant to the Director-General, SSC, EPA, DLWC, DMR, NPWS and CCC within two weeks of the report's completion for comment.
- (b) The audit shall:
  - (i) assess compliance with the requirements of this consent, licences and approvals;
  - (ii) assess the development against the predictions made in the EIS;
  - (iii) review the effectiveness of the environmental management of the mine, including any mitigation works:
  - (iv) be carried out at the Applicant's expense; and
  - (v) be conducted by a duly qualified independent person or team approved by the Director-General in consultation with SSC.
- (c) The Director-General may, after considering any submission made by the relevant government agencies, SSC 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.

**Note**: the Director-General may agree to a request from the Applicant that the Independent Environmental Audit requirement under this condition be integrated with similar audits required in accordance with other development consents applicable to the Bulga Complex.

### 8.2 Meteorological

Meteorological monitoring shall be undertaken by the Applicant for the life of the Beltana No. 1 mine utilising the existing meteorological station installed at the Bulga Complex. The monitoring results from this station shall be incorporated in the AEMR.

### 9. Reporting

### 9.1 Reports on Operations

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

### 9.2 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), which may be incorporated into the existing Bulga Complex AEMR where appropriate, 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 predictions made in the EIS, diagrams and tables, the report shall include, but not be limited to, the following matters:
  - (i) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals;
  - (ii) a review of the effectiveness of the environmental management of the mine in terms of EPA, DLWC, DMR, and SSC requirements;
  - (iii) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person;
  - (iv) identification of trends in monitoring results over the life of the mine;
  - (v) an assessment of any changes to agricultural land suitability resulting from the Mining Operations, including cumulative changes;
  - (vi) a listing of any variations obtained to approvals applicable to the DA area during the previous year;
  - (vii) 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;
  - (viii) rehabilitation report; and
  - (ix) 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 during preparation of each report for any additional requirements;
  - (ii) comply with any reasonable 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 to the Director-General, DMR, EPA, DLWC, NPWS, SSC and CCC, and made available for public information at SSC within fourteen days of submission to these authorities.

### 9.3 Recording and Reporting Requirements

### **Monitoring Records**

- (a) The results of any monitoring required to be conducted by this consent, or a licence under the *Protection* of the *Environment Operations Act 1997*, in relation to the development or in order to comply with any load calculation protocol must be recorded and retained as set out in subclauses (b) and (c).
- (b) All records required to be kept by the licence must be:
  - (i) in a legible form, or in a form that can readily be reduced to a legible form;
  - (ii) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - (iii) produced in a legible form to any authorised officer of the EPA who asks to see them.
- (c) The following records must be kept in respect of any samples required to be collected:
  - (i) the date(s) on which the sample was taken;
  - (ii) the time(s) at which the sample was collected;
  - (iii) the point at which the sample was taken; and
  - (iv) the name of the person who collected the sample.
- (d) The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the *Protection of the Environment Operations Act 1997* in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return. This may form part of the AEMR.

### 10. Community Consultation/Obligations

### 10.1 Community Consultative Committee

The Applicant shall

- (a). (i) Establish or expand the responsibilities of the existing CCC for the Bulga Complex to incorporate all issues specific to the Beltana No.1 mine. A meeting of the CCC must be convened prior to the submission of the Environmental Management Strategy (Condition 3.2).
  - (ii) Representatives from relevant government agencies or other individuals may be invited to attend meetings as required by the Chairperson. The Committee may make comments and recommendations about the preparation and implementation of environmental management plans, monitor compliance with conditions of this consent and other matters relevant to the operation of the mine during the term of the consent. The Applicant shall ensure that the Committee has reasonable access to the necessary plans for such purposes. The Applicant shall consider the recommendations and comments of the Committee and provide a response to the Committee and Director-General.
- (b) The Applicant shall, at its own expense:
  - (i) nominate two (2) representatives (including the Environmental Officer) 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 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; and
  - (v) provide meeting facilities for the Committee, and ensure minutes of Committee meetings are taken. These minutes shall be available for public inspection at SSC within 14 days of the meeting, or as agreed by the Committee.

#### 10.2 Complaint Handling Procedures

- (a) The Environmental Officer employed by the mine (refer condition 3.1) shall be responsible for:
  - (i) establishing and maintaining a system for recording complaints with respect to construction works and mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, or other suitable data base, and ensuring that an initial response is provided to the complainant within 24 hours;
  - (ii) for providing a report of complaints received with respect to the construction and operation of the mine, every six months throughout the life of the project to the Director-General, SSC, EPA, DMR, and CCC, or as otherwise agreed by the Director-General. A summary of this report shall be included in the AEMR (condition 9.2(a)).
- (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.

### 11. Applicant's Obligations

### 11.1 Area of Affectation – Land Acquisition

**Note**: In Condition 11.1 (a)-(g) "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). The Applicant shall seek to conclude an agreement to purchase a property, or part of a property, as identified by 6.1.3 (c) or 6.3.3(b) within six (6) months of a written request from the affected land owner. The owner of any dwelling, or vacant land (as described in 6.1.3 (c) or 6.3.3 (b)), located in areas that exceed noise and/or air quality criteria established in accordance with conditions 6.1.1 and 6.3.1 and of this consent, and at any time after the granting of development consent, may request the Applicant in writing to purchase the whole or part of that property.
- (b). 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, as if the land was unaffected by the Beltana No.1 Project the subject of this DA, having regard to:
    - the existing use and existing permissible use of the land in accordance with the planning instruments in force at the date of the written request; and
    - the presence of permissible or approved improvements on the land and/or any Council approved building or structure which is 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.

- the owner's reasonable compensation for disturbance allowance and relocation costs within the Singleton Local Government Area, 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.

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.

- (c). In the event that either the owner or the Applicant is not satisfied 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 Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners and the Applicant, a fair and reasonable acquisition price for the land as described in sub-clause (b) and/or terms upon which it is to be acquired;
  - (ii) in the event that either the owner or the Applicant is not satisfied with the determination of the independent valuer, 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:
    - 1) the appointed independent valuer,
    - 2) the Director-General or nominee, and
    - 3) 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 (b) above and/or the terms upon which the property is to be acquired.

- (d). 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 (b) and (c).
- (e) Upon receipt of a determination pursuant to sub-clauses (b) and (c), 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 in writing 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.
- (f) In the event that the Applicant and the land owner agree that only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with applying for Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.
- (g) The provisions of this condition do not apply to a land owner who is the holder of an authority under the Mining Act. 1992.

#### 11.2 Cumulative Impact Management

- (a) In the event that the cumulative impact of noise or dust contributed by the operation of the Beltana No. 1 mine and other nearby mines, including Bulga Open Cut, South Bulga Colliery, Mt Thorley Operations and Warkworth Mine, and any future mining activities/ industrial operations, at dwellings, or vacant land (as described in Condition 6.1 and 6.3), in the vicinity of the operation, is in excess of the noise or dust acquisition criteria contained in these conditions of consent, the Applicant shall endeavour, as far as reasonably practicable, to negotiate with the other companies and landowner to determine appropriate arrangements to reasonably contribute to the management of the identified cumulative impacts to the satisfaction of the Director-General in proportion to their contributions to the impact.
- (b) If agreement cannot be reached from negotiations undertaken in accordance with subclause (a), then, with the agreement of the other contributing mines, the matter is to be referred to the Director-General in consultation with SSC by either the Applicant or landowner. If the matter is not resolved within 21 days of the referral, the matter will be referred to an Independent Dispute Resolution Process as determined by the Director-General, and resolved as determined by the Director-General. The Independent Dispute Resolution Process shall determine the responsibilities of each of the mining companies in accordance with subclause (a) above and actions to be undertaken. The decision of the Independent Dispute Resolution Process shall be final, as determined by the Director-General.
- (c). Prior to referral to the Independent Dispute Resolution process, the Applicant shall provide the Director-General a report detailing the Applicant's reasons for being unable to reach agreement with the other parties, and the reasons for the criteria exceedences with demonstration that Beltana No.1 activities are not the sole cause of the exceedence.

### 11.3. Joint Acquisition Management Plan

The Applicant shall, prior to commencement of Secondary Workings, use all reasonable endeavours to prepare a Joint Acquisition Management Plan with Bulga Open Cut, South Bulga Colliery, Mt Thorley and Warkworth Mine, to the satisfaction of the Director-General. Any plan prepared pursuant to this condition shall as far as practicable provide details of a joint approach to be adopted in regard to meeting the acquisition procedure requirements outlined in Condition 11.1 of this consent.

#### Note:

- 1. The Applicant shall endeavour to enter into an agreement with other nearby Mining Operations to address any potential cumulative management and joint acquisition requirements of this development consent;
- 2. The intent of this condition is to encourage mining companies to form a voluntary agreement regarding the management and acquisition of properties subject to cumulative impacts;
- 3. The Department will be requiring joint acquisition requirements in all development consents where cumulative impacts are known to occur, and may potentially occur, as a result of mine related activities.

### 11.4. Compensation and Land Acquisition and as a Result of Subsidence

Note: Compensation and other measures for subsidence impacts, are also available under the provisions of the Mining Act 1992 and the Mine Subsidence Compensation Act 1961.

### (A) Compensation and Acquisition – Significant Structural Damage to Dwellings

- (a) Where a dwelling within the DA area is, or is likely to be (as identified in the Private Property Subsidence Management Plan referred to in Condition 3.3.1, subject to damage beyond the safe, serviceable and repairable criteria as a result of the development, the landowner, after receiving notification from the Applicant in accordance with Condition 3.3.4(a)(ii), may request the Applicant in writing to:
  - (i) carry out such works as agreed by the landowner to remedy or mitigate any damage; or
  - (ii) compensate the landowner for such effects; or as a last resort and failing all other measures,
  - (iii) acquire the whole of the property, or such part of the property requested by the landowner where subdivision is approved.
- (b) The Applicant shall comply with any such request for compensation or acquisition in accordance with Conditions 11.4(C) and (D). If necessary to confirm the impact, the Applicant shall, at the request of the landowner in writing, conduct a follow-up structural inspection to one carried out under Condition 3.3.1 (e)(v). Any inspection or assessment under this Condition shall be conducted as if it were conducted under the relevant part of Condition 3.3.1(e)(vii).
- (c) Any disputes relating to compensation may be referred by either party to:
  - the Mining Warden at any time in accordance with the provisions of the Mining Act; or
  - the Mine Subsidence Board at any time in accordance with the provisions of the Mine Subsidence Compensation Act 1961.
- (d) Any disputes relating to land acquisition (except those relating to valuation matters) may be referred by either party to the Director-General for consideration and advice if no agreement is reached within three months of receipt by the Applicant of the written request.

### (B) Compensation and Acquisition – Land Capability Impacts

- (a) Where a landowner suffers, or is likely to suffer a significant loss of land capability or agricultural productivity (as identified in the Private Property Subsidence Management Plan referred to in Condition 3.3.1.(f)), as a result of the development, the landowner, after receiving notification from the Applicant in accordance with Condition 3.3.4(a)(ii), may request the Applicant in writing to:
  - (i) carry out such works as agreed by the landowner to rectify the problem; or
  - (ii) compensate the landowner for such effects; or, as a last resort and failing all other measures,
  - (iii) acquire the whole of the property, or such part of the property requested by the landowner where subdivision is approved.

- (b) Any disputes relating to compensation may be referred by either party to the Mining Warden at any time in accordance with the provisions of the Mining Act.
- (c) Any disputes relating to acquisition (except those relating to valuation matters) may be referred by either party to the Director-General for consideration and advice if no agreement is reached within three months of receipt by the Applicant of the written request.
- (d) If the matter is referred to the Director-General in accordance with subclause (c) above, the Director-General shall appoint an Independent Expert, in consultation with the Applicant and the landowner and in accordance with the "Evaluation Process for Land Acquisition due to Land Capability Impacts caused by Subsidence" (refer to Schedule A). The Applicant shall bear the costs of engaging the Independent Expert.
- (e) The Independent Expert shall determine the level and extent of loss or impacts, and recommend whether acquisition is required, and in doing so, shall consider the following matters:
  - the level of predicted or actual subsidence:
  - the level of land capability and/or agricultural productivity as unaffected by underground mining;
  - the assessment of agricultural utilisation, agricultural improvements and the underlying agricultural productivity of the relevant property prior to Mining Operations, as determined in the relevant Property Subsidence Management Plan (in accordance with Condition 3.3(e)(vi));
  - the impact of subsidence on the land capability and agricultural productivity of the land;
  - the nature and extent of feasible mitigation measures; and
  - previous issues considered by the Mining Warden in any compensation considerations under the Mining Act.

A recommendation for acquisition of a property may only be made by the Independent Expert where the Expert is satisfied that after consideration of feasible mitigation measures the impact of subsidence is such as to significantly adversely affect the existing and future land capability and/or agricultural productivity.

(f) Where it is determined by the Director-General that a property is eligible for acquisition, and acquisition is requested by the landowner, the Applicant shall comply with any such request in accordance with Conditions 11.4(C)-(D).

### (C) Acquisition - Procedure

- (a) Upon receipt of a written request to purchase property in accordance with any part of condition 11.4, the Applicant shall negotiate and purchase the whole of the property (unless the request specifically requests acquisition of only part of the property and subdivision has already been approved) within six months of receipt of the request. The Applicant shall pay the landowner an acquisition price resulting from proper consideration of:
  - (i) a sum not less than the current market value of the owner's interest in the land at the date of this consent, as if the land was unaffected by Beltana No. 1 mine, 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 improvements on the land and/or any Council approved building or structure which although substantially commenced at the date of the request is completed subsequent to that date.
  - (ii) the owner's reasonable compensation for disturbance allowance and relocation within the Singleton Local Government Area, or within such other location as may be determined by the Director-General in exceptional circumstances;
  - (iii) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price for the land and the terms upon which it is to be acquired; and

- (iv) the purchase price determined by reference to points (i), (ii) and (iii) shall be reduced by the amount of any compensation awarded to a landowner pursuant to the *Mining Act, 1992* or other legislation providing for compensation in relation to coal mining but limited to compensation for dwellings, structures and other fixed improvements on the land, unless otherwise determined by the Director-General in consultation with the DMR or MSB.
- (b) An offer by the Applicant to purchase a property under the conditions of this consent shall remain open to the landowner for the following periods from the date of the offer:
  - (i) for damage to a dwelling beyond the safe, serviceable and repairable criteria (Condition 11.4(A)), three years after completion of mining of longwall panels that affect the property; and
  - (ii) for land capability and/or agricultural productivity impacts (Condition 11.4(B)), five years after completion of mining of longwall panels that affect the property.
- (c) Notwithstanding any other Condition of this consent, the landowner and the Applicant may enter into any other agreed arrangement regarding compensation; or 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.

### (D) Independent Valuation

- (a) In the event that the Applicant and the landowner cannot agree within three months upon the acquisition price of the land and/or the terms upon which it is to be acquired under the terms of this consent, then either party may refer the matter to the Director-General who shall request an independent valuation to determine the acquisition price. The independent valuer shall consider any submissions from the landowner and the Applicant in determining the acquisition price.
- (b) If the independent valuer requires guidance on any contentious legal, planning or other issues, the independent valuer shall refer the matter to the Director-General, who, if satisfied that there is a need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of:
  - (i) the appointed independent valuer;
  - (ii) the Director-General; and/or
  - (iii) the President of the Law Society of NSW or nominee.

The qualified panel shall, on the advice of the valuer, determine the issue referred to it and advise the valuer.

- (c) The Applicant shall bear the costs of any independent valuation or survey assessment requested by the Director-General and without any improvements made by the Applicant.
- (d) The Applicant shall, within fourteen days of receipt of a valuation by the independent valuer, offer in writing to acquire the relevant land at a price not less than the said valuation and without any improvements made by the Applicant.

### 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 Environmental Planning and Assessment Act 1979, 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, and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by the SSC, EPA, DMR, NPWS, DLWC, RTA, NSW Agriculture, and NSW Fisheries, are fully met.

## (b) <u>Structural Adequacy</u>

Detailed plans and specifications relating to the design and construction of each structural element associated with the proposed development are to be submitted to the Principal Certifying Authority prior to the construction of each particular building or structure. 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.

#### (c) <u>Verification of Construction</u>

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

- footings;
- concrete structures, including ground floor and any subsequent floors, retaining walls and columns;
- framing and roof structure;
- fire protection coverings to building elements required to comply with the Building Code of Australia; and
- mechanical ventilation.

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

# SCHEDULE A Explanatory Flow Charts

### Note:

- The process will be subject to a procedural protocol to ensure that the process is transparent and consistent
- The process will be subject to terms of reference on both a qualitative and quantitative basis against which judgements will be made.
- In relation to disputes regarding noise impacts, the process will only result in agreed outcomes regarding mitigation measures proposed by the Applicant in the noise management zone. Acquisition is not an option in the noise management zone, unless otherwise privately agreed between the Applicant and landowner, and therefore acquisition will not be an option for the dispute resolution process to consider in these cases.