

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 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, 30 January 2002

File No. S00/01704

Schedule 1

Application made by: BeMaX Resources NL (ACN 009 247 858) on behalf of the BIP Joint Venture (a joint venture between BeMaX Resources NL 75% and Probo Mining Pty Limited 25% [ACN 079 938 819]) ("the Applicant").

To: The Minister for Urban Affairs and Planning
(DA 251-09-01)

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

For the following: Development of a mineral sands mine, and construction and operation of associated surface facilities ("the Development").

BCA Classification:

Class 3	Accommodation camp
Class 5	Mine, administration, construction, contractor, engineering, processing and control room offices
Class 7	Store(s)
Class 8	Workshop(s)
Class 9	Laboratory
Class 10	Change house(s), fuel storage(s), pump house(s) and compound(s), communication tower(s), dredge, primary mineral separation plant

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

SCHEDULE 2

Development Consent Conditions for the Ginkgo Mineral Sand Mine

Red type represents September 2003 Modifications

Blue type represents May 2005 Modifications

Green type represents April 2006 Modifications

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DEFINITIONS:

AEMR - Annual Environmental Management Report

Construction - Construction of road works and surface facilities, and clearing of vegetation relating to the construction of road works and surface facilities

DA - Development Application

DA area - Development Application area which includes all works described in the DA.

Director-General - Director-General of the Department of Planning or delegate.

EIS - Environmental Impact Statement

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

Local Residents - owners/occupants of Manilla, Roo Roo and Woodlands Stations

Landholder – includes owners and occupants of a property

Mineral Concentrate Transport Route – as identified in Figure 1-2 of the EIS, including the highway access road (formed by a section of Old Roo Roo Road and a new section of road detailed in Figure 1.2 of the EIS) and the length of Silver City Highway from the junction of the highway access road to the NSW-Victorian border.

Mining Operations - Includes overburden removal, mineral sands extraction and vegetation removal and soil stripping;

Project – includes the construction, operation and rehabilitation of a minerals sand mine and ancillary infrastructure, including the construction of a highway access road, an electricity transmission line and a potable water pipeline;

Surface facilities - overburden emplacement and overland conveyor system, soil stockpiles, dredge and floating plant, borefield, initial water and sands residue dam, administration and accommodation camp buildings; electricity transmission line, roads, potable water reticulation and treatment, sewerage treatment plant, fuel and consumables storage facilities.

Government Authorities

WSC - Wentworth Shire Council

DLWC - Department of Land and Water Conservation

DMR - Department of Mineral Resources

DoP (planningNSW) - Department of Planning

EPA - Environment Protection Authority

NPWS - National Parks and Wildlife Service

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 illustrate various processes contained in this consent
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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. 251-09-01, and the EIS dated September 2001, prepared by Resource Strategies and certified in accordance with Section 78A(8) of the Act, and the following documentation:
- (i) various additional information regarding the *Neobatrachus pictus* (*N. pictus*) assessment and management provided to the Department by Resource Strategies;
 - (ii) additional information provided to EPA by Resource Strategies, including the letter dated 25 October 2001 with the attached "Response to EPA Information Requests;"
 - (iii) additional information provided to DLWC by Resource Strategies, including the letter dated 22 October 2001;
 - (iv). additional information supplied by Resource Strategies to the Department of Planning in response to the issues raised in submissions received during the exhibition period for the project;
 - (v). the modification application MOD 14-3-2003 and accompanying Statement of Environmental Effects, dated February 2003 and prepared by Resource Strategies Pty Limited";
 - (vi) Statement of Environmental Effects in support of a Section 96(2) application for the Ginkgo Mineral Sands Project, dated January 2005, prepared by Resource Strategies Pty Ltd;
 - (vii) Statement of Environmental Effects in support of a Section 96(1A) application for the Ginkgo Mineral Sands Project, dated 21 December 2005, prepared by Resource Strategies Pty Ltd;
- 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 of 21 years from the date of the mine lease approval for the Ginkgo Mineral Sands Mine.
- (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 WSC, at least two weeks prior to commencement of construction and Mining Operations respectively.

1.3 Dispute Resolution

In the event that the Applicant, WSC 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 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 Mining Operations Plans (Document 08060002.GUI or its most recent equivalent);
 - (ii) demonstrate consistency with the conditions of this consent and any other statutory approvals;
 - (iii) demonstrate consistency with the Environmental Management Plans for the project site;
 - (iv) provide the basis for implementing mining operations, environmental management, and ongoing monitoring;
 - (v) include a mine rehabilitation and land use management plan;
 - (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;
 - surface water and groundwater management, and
 - proposals to appropriately minimise surface impacts.
- (c) In preparing the Mine Operations Plan, 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 WSC 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 WSC and for approval of DMR and the Director-General.

2.2 *Limits on Production*

Mineral sands (ore) production from the project shall not exceed 13 million tonnes per annum (Mtpa).

3. Land and Site Environmental Management

3.1 Appointment of Environmental Officer

- (a) The Applicant shall ensure that a suitably qualified and experienced Environmental Officer is available throughout the life of the mine, whose appointment is to be approved by the Director-General, in the first instance before the Officer commences duties. The Officer, in conjunction with the Mine Manager, shall manage the following responsibilities:
- (i) the preparation of the environmental management plans (refer to Condition No. 3.2);
 - (ii) the application of the matters specified in the conditions of this consent to the operation of the Project and compliance with such matters;
 - (iii) receiving and responding to complaints;
 - (iv) an environmental induction and training program for all persons involved with construction activities, mining and remedial activities; and
 - (v) making recommendations to take reasonable steps to avoid or minimise adverse environmental impacts. The Mine Manager shall issue instructions to stop work if an adverse impact on the environment is likely to occur.
- (b) The Applicant shall notify the Director-General, DMR, EPA, NPWS, DLWC, WSC and the local residents of the name and contact details of the Environmental Officer upon appointment and any changes to that appointment.

3.2 Environmental Management Strategies and Plans

- (a) The Applicant shall prepare an Environmental Management Strategy providing a strategic context for the environmental management plans. The Environmental Management Strategy shall be prepared following consultation with the NPWS, DLWC, EPA, DMR, WSC, and the local residents 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 WSC, EPA, DLWC, NPWS, DMR within fourteen days of approval by the Director-General. The Applicant must also make copies of the Environmental Management Strategy available to local resident on request.
- (d) The Applicant shall prepare the following environmental management plans:
- (i) Aboriginal Heritage Management Plan (Condition 3.3.1(a));
 - (ii) Flora and Fauna Management Plan (refer condition 3.4.1(a))

- (iii) Neobatrachus pictus (Painted Burrowing Frog) Management Plan (Condition 3.4.2);
- (iv) Integrated Erosion and Sediment Control Plan (IESCP)(Conditions 3.5(b));
- (v) Bushfire Management Plan (Condition 3.8(b));
- (vi) Land Management Plan (Condition 3.9);
- (vii) Site Water Management Plan (Condition 4.1);
- (viii) Borefield Impact Management Plan (Condition 4.2(iii)(a))
- (ix) Landfill Environmental Management Plan (Condition 5.1.5);
- (x) Dust Management Plan (Condition 6.1);
- (xi) Noise Management Plan (Condition 6.2.2)
- (xii) Traffic Code of Conduct (Condition 7.1);
- (xiii) Transport of Hazardous Materials Plan (Condition 7.7).

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, WSC and local residents, and ensure that the plans are made publicly available at WSC within 14 days of approval.
- (f) The management plans are to be reviewed, and updated as directed by the Director-General, in consultation with the relevant government agencies. They will reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial environmental management plan.
- (g) Within 3 months of the date of approval of the January 2006 modification, the Applicant shall review and update as necessary the environmental management strategies and plans in consultation with the relevant government agencies, to the satisfaction of the Director-General.

3.3 Heritage Assessment, Management and Monitoring

3.3.1 Aboriginal Heritage

Assessment and Management

- (a) The Applicant shall prior to the commencement of construction, prepare an Aboriginal Heritage Management Plan to address Aboriginal heritage issues pertaining to the project, **including all sites and relics identified in the corridors of the realigned ancillary infrastructure in accordance with modification application MOD 14-3-2003..** The Plan shall be prepared in consultation with relevant stakeholders that may include the Dareton Local Aboriginal Land Council, the Barkandji Native Title Claimants and NPWS. The Aboriginal Heritage Management Plan shall be prepared to the satisfaction of the Director-General and NPWS. The Plan shall include but not be limited to:
 - (i) ¹details of the collection, storage and replacement of relics, including specific details on the storage and curation of these relics;
 - (ii) ²details of the timeframes for which relics are to be stored and proposed timing for replacement of the relics;
 - (iii) ³details of measures to avoid impacting on relics, including any impacts from earthworks, transport and associated infrastructure. This must include details of all buffer areas and protective fences for protection of relics located adjacent to disturbance areas;
 - (iv) ⁴details of monitoring proposals to assess the effectiveness of the mitigation measures to ensure that relics are not being inadvertently impacted
 - (v) the action to be undertaken should any Aboriginal archaeological site or relic be found,

¹ NPWS General Terms of Approval

² NPWS General Terms of Approval

³ NPWS General Terms of Approval

⁴ NPWS General Terms of Approval

- (vi) other than those already identified, in the DA areas;
detail all statutory requirements to be met regarding the disturbance, destruction or removal of Aboriginal heritage under the *National Parks and Wildlife Act 1974*
- (vii) ⁵details of ongoing consultation undertaken with NPWS, Dareton Local Aboriginal Land Council, Bakandji native title claimants in the preparation of this Plan;
- (viii). ⁶proposals to allow the clear dissemination of cultural heritage information, including an outline of how the results of the further study will be publicly disseminated and the community informed of the outcome of the study
- (vii) ⁷details as to how the results of the further study and analysis in the area will be placed in a regional context integrating the results of any study into the knowledge and interpretations for the region as a whole.

- (b) If during the course of Construction or Mining Operations, the Applicant becomes aware of any Aboriginal heritage and/or archaeological relics not previously identified, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include NPWS and the relevant local Aboriginal group(s). Any necessary permits or consents shall be obtained and complied with prior to recommencement of work in the relevant area.

Note: The Applicant is required to obtain consent under Section 90 of the National Parks and Wildlife Act 1974 prior to disturbing any Aboriginal archaeology site or relic. All isolated artefacts in the mine path and within other areas of the Highway Access Road, Electrical Transmission Line and Potable Water Pipeline are to be included in the Consent application.

(c). Monitoring

The Applicant shall monitor the effectiveness of the measures outlined in the Aboriginal Heritage Management Plan [Condition 3.3.1(a)]. A summary of monitoring results shall be included in the AEMR.

3.3.2 European Heritage

Assessment and Management

- (a) The Applicant is required to lodge an application for the removal of the early surveyor's post with the Land and Property Branch (DLWC) in accordance with the provisions of the *NSW Surveyors Act 1929* and the *NSW Survey Marks Act 1912*. If the application to remove the surveyor's post is approved, the surveyor's post is to be recorded *in-situ* prior to removal. The recording must include a historical assessment, a photographic recording (including detailed archival photographs of any markings shown on the post) and an accurate recording of the exact location of the post on a GIS mapping system. Appropriate arrangements for the archival storage/display of the post are to be determined prior to its removal. In this regard, discussions are to be held with the Wentworth Historical Society and the Land and Property Information Branch, Bathurst.
- (b) If during the course of Construction or Mining Operations, the Applicant becomes aware of any European heritage items or archaeological relics not previously identified (particularly at the Greenvale Homestead complex and its historic graveyard), all work likely to affect the material shall cease immediately and the relevant organisations consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include the NSW Heritage Office, WSC and the Wentworth Historical Society. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work in the relevant area.
- (c) The Applicant shall implement the recommendations outlined in Appendix M of the EIS, to minimise the impact of the development upon the identified items of heritage significance.

Note: No European heritage site or relic shall be disturbed or destroyed without prior consent.

⁵ NPWS General Terms of Approval

⁶ NPWS General Terms of Approval

⁷ NPWS General Terms of Approval

3.4 Flora and Fauna Assessment, Management and Monitoring

3.4.1 General Flora and Fauna Management

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

(i). Formulation of a Vegetation Clearance Protocol

- details of pre-clearance inspections prior to clearing of any vegetation, including the identification of mature trees and trees with hollows and stags, and also including the inspection of potentially affected riverine vegetation along the Darling River (pump station) and the Great Darling Anabranch (highway road-crossing). Details must be included as to when and where these inspections will occur. These inspections shall be undertaken by an appropriately qualified and experienced ecologist for the presence of any threatened fauna utilising the vegetation;
- quantification of the amount of *Swainsona flavicarinata* and *Swainsona adenophylla* to be cleared.
- details of techniques, such as selective clearing to be implemented to minimise unnecessary clearance of native vegetation and to avoid wherever possible, the clearance of riverine woodland, belah woodland and mallee communities;
- in circumstances where removal is necessary, detail of clearing operations would be suitably managed to maximise the reuse of cleared vegetative material in the rehabilitation program. This shall include the collection of seed stock and the removal and stockpiling of soil resources, cleared vegetation and stumps for re-use.
- ⁸All scrub, undergrowth and timber removed from the area of operation shall be burnt or otherwise disposed of so that the debris cannot be swept back into a stream during a flood. Burning shall not be carried out unless a permit is obtained from the relevant authority. Notwithstanding, where possible hollow bearing limbs/stags shall be salvaged and relocated to areas regenerated with native vegetation or existing areas of native vegetation, to augment and reconstruct faunal habitat.
- details of proposals to time vegetation clearance so as to minimise disturbance to threatened species.

(ii) Reconstruction of native bushland

- the establishment of long-term post-mining land use objectives over the site;
- details of the principal goal to replace each community type to be removed on site, with communities of same or similar dominant species composition;
- measures to connect existing areas and future areas of habitat rehabilitation to form a network of wildlife corridors throughout the site and to adjoining lands;
- strategies for the preparation of the site for habitat rehabilitation, as part of the revegetation;
- details of the utilisation of local endemic species or species naturally occurring only in the area of the development for regeneration;
- methods of revegetation;
- measures for the dispersal of rocks and logs of varying sizes throughout the proposed revegetated areas to provide refuge and basking sites for herpetofauna;
- details of the fencing of all habitat rehabilitation areas to prohibit grazing by stock;
- strategies to manage the impact of surface water management, erosion and sediment control measures, and flooding mitigation measures on flora and fauna, including the impact of heavy

⁸ DLWC General Terms of Approval

- machinery; and
- details of a weed control programme to be implemented to control the spread of weeds

(iii). Species management

- details of pre-clearance surveys to search, trap and release fauna that may be impacted by the construction activities;
 - details of appropriate procedures to be implemented to relocate fauna species found during pre-clearance surveys to suitable alternative habitat;
 - details of speed limits to be implemented to limit vehicle strike on fauna in the Project area. This shall include a map to illustrate where these speed limits will be implemented and the respective speed limits to be enforced;
 - details of management strategies to be implemented for the Project, site employee education and dissemination of monitoring data. Details must also be included as to road culvert design and installation for fauna movement, including a concept drawing of the proposed culverts, the location of these structures and which species the culverts are targeting;
 - details of feral animal control program, including proposals to prevent the scavenging and colonisation by introduced species, with particular attention to minimising the impacts of this program on native fauna.
- (b). i. The Applicant must assess the feasibility of translocation for any individuals of the following, or any other, threatened species identified within the area of disturbance which would otherwise be destroyed:
- Swainsona flavicarinata*;
 - Swainsona adenophylla*;
 - Western Blue-tongue Lizard; and
 - Painted Burrowing Frog
- ii. In accordance with this assessment, the Applicant shall develop a translocation protocol for the species identified above, and a generic protocol for other groups of species (eg. reptiles, amphibians, avifauna, flora etc) in consultation with NPWS, and to the satisfaction of the Director-General. The protocol(s) must outline the findings of this assessment, the proposed measures to be adopted should any individuals of the species nominated in subclause b(i) be identified in the area of disturbance and a mechanism for the notification of NPWS should any translocation occur. The protocol must also demonstrate that relevant issues from the following documents have been considered:
- NPWS's *Draft circular on the translocation of threatened flora*;
 - NPWS's *Interim policy for the translocation of threatened fauna in NSW*; and
 - Guidelines for the translocation of threatened plants in Australia* a report by the Australian Network for Plant Conservation.
- iii. Translocated species should be established in suitable, but secure, areas as close as possible to their point of origin.
- (c) The Applicant must employ a qualified botanist to carry out further targeted surveys for the following threatened flora species:
- Swainsona flavicarinata*; and
 - Swainsona adenophylla*.
- These surveys must be undertaken prior to construction in appropriate habitat and during the flowering period for these species. The results of these surveys must be provided to NPWS and the Director-General for review and approval. The Applicant must also notify NPWS and the Director-General in writing of any new sightings of threatened flora detected within the footprint of the activity prior to the commencement of clearing.
- (d) If threatened species (listed under the *Threatened Species Conservation Act, 1995*) other than those recognised in the EIS are identified on the site during construction or operation of the mine, the Applicant shall immediately notify NPWS. The Applicant shall cease any work which could adversely impact on the identified species, should an appropriately qualified and experienced ecologist (approved by the Director-General) in consultation with NPWS deem it necessary. In the event that work ceases, work shall not recommence until advice has been received from NPWS.

- (e) The efforts and progress of the Flora and Fauna Management Plan shall be documented in the AEMR in accordance with the Department of Mineral Resource's *Guidelines to the Mining, Rehabilitation and Environmental Management Process* (March 1998) or its latest version;
- (f) During the life of the mine and until the Mining Lease is relinquished by DMR, the Applicant shall maintain the revegetated areas. Maintenance shall include but not be limited to:
- replanting failed or unsatisfactory areas;
 - repairing erosion problems;
 - fire management;
 - pest and weed control;
 - control of feral animal populations;
 - maintain and repair fencing;
 - fertiliser application;
 - establishment of enhancement techniques (eg watering) for revegetation areas especially during periods of low or limited rainfall; and
 - application of lime or gypsum to control pH and improve soil structure.

3.4.2. *Neobatrachus pictus* (Painted Borrowing Frog) Management

- (a). The Applicant is required to prepare a *N. pictus* Management Plan prior to the commencement of construction in consultation with NPWS and to the satisfaction of the Director-General. The Plan shall be prepared by an experienced and qualified ecologist with demonstrated knowledge and experience in *N. pictus* ecology and management. The Plan may form part of the Flora and Fauna Management Plan required under Section 3.4.1. The Plan shall include (but not be limited to):

i. Monitoring program

The Applicant is required to implement a monitoring program for *N. pictus* in consultation with NPWS and an appropriately qualified amphibian specialist. The frequency of monitoring of the programme is to be determined to the satisfaction of NPWS. This program shall be implemented during an appropriate time to target this species and must include:

- surveys to confirm the distribution and abundance of *N. pictus* in the Project Area and immediate vicinity. The sampling design of the surveys shall be approved by NPWS prior to the surveys being conducted. The results of the surveys shall be provided to NPWS and the DoP for their review and shall be applied to the active and ongoing management of this species;
- periods of opportunistic surveying in the evening following significant rainfall events, and including targeting of direct disturbance areas;
- regular inspection of the dredge pond at a frequency to be determined in consultation with NPWS and details of any necessary mitigation measures;
- a record of *N. pictus* habitat types and behavioural observation;
- a comparison of frog deformity levels between monitoring sites located within and adjacent to the mine site and regional sites. This information should be included to provide comprehensive species information and allow for the establishment of baseline abnormality levels within populations of the species.
- the relative abundance and species richness of any other frog species identified during monitoring shall also be assessed;

ii. Species Management

Management strategies to be incorporated into the *N. pictus* Management Plan shall to be formulated in consultation with NPWS. The overall objectives of the *N. pictus* Management Plan shall be consistent with the *Painted Burrowing Frog (Neobatrachus pictus) Recovery Plan* (NPWS, 2000) including:

- (a) confirming the existence of *N. pictus* in south-west NSW;
- (b) encourage the location and identification of any extant populations;
- (c) improve the knowledge of the distribution of *N. pictus* in south-west NSW; and

- (d) identify any current or potential threats to identified populations.

These management measures shall include,

- a detailed assessment of the specific activities and environmental changes that may occur, and to what an assessment of which areas, habitat features or sub-populations may be affected by the development and to what extent.
 - Management strategies shall include road culvert design and installation, weed and feral animal control, site employee education and dissemination of monitoring data;
 - a detailed assessment as to what extent the proposed measures will mitigate these threats; and
 - contingency measures should these mitigation measures prove ineffective;
- (b) Prior to the commencement of Mining Operations, or as otherwise agreed by the Director-General, the Applicant shall establish a protocol for compensatory measures for any potential disturbance to the Painted Burrowing Frog in consultation with NPWS and to the satisfaction of the Director-General. These compensatory measures may include, but are not limited to:
- i. the establishment of compensatory habitat(s) in or near the Project area;
 - ii. dedication of an area of suitable ecological integrity and characteristics elsewhere, as determined in consultation with the NPWS;
 - iii. financial contributions; or
 - iv. the ecological enhancement and management of an area of land that is determined to represent suitable habitat for the species.

The establishment of compensatory measures shall consider the results of monitoring for the species undertaken in accordance with this consent [refer to Condition 3.4.2(a)].

Should the monitoring for the species undertaken in accordance with this consent identify appropriate parcel(s) of compensatory habitat for this species, the Applicant shall endeavour to reach an agreement for the management of this area with the NPWS, DLWC, and the leaseholder.

Should the Applicant be unsuccessful in negotiating and establishing acceptable compensatory habitats or any other compensatory measures specified in this condition, the Applicant is required to document the attempts to meet the requirements, and of the reasons for being unsuccessful in developing the compensatory measures.

The requirements of the protocol may be reviewed by the Director-General following the results of the monitoring for the species undertaken under this consent.

3.4.3 Monitoring

- (a) The regeneration works shall be monitored by an appropriately qualified and experienced ecologist. the Director-General and DMR shall be notified of the name and qualifications of the ecologist. The results of the monitoring and the effectiveness of the revegetation shall be publicly reported annually as part of the AEMR.
- (b) The Applicant shall prepare a detailed monitoring program of habitat areas on land owned by the BIP Joint Venture, which will be impacted on by the development, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development. The program is to be prepared in consultation with NPWS. The monitoring program shall be included in the Flora and Fauna Management Plan (Condition 3.4.1(a)) and a summary of the results shall be provided in the AEMR. The program shall:
- i. monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall carry out any further works required by the Director-General as a result of the monitoring;
 - ii. establish an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristics and structure and to propose contingency measures for improvements to

revegetation if required; and

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

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

3.4.4 Southern Mallee Offset Strategy

- (a) The Applicant shall establish, conserve and maintain at least 351 hectares of Southern Mallee vegetation communities, including at least 4 hectares of Chenopod Mallee communities, or an alternative offset arrangement to the satisfaction of the Director-General.

The Applicant may release 230 hectares of this offset area, if it can demonstrate the long term success of woodland (ie. native tree) rehabilitation on the northern initial overburden emplacement and those areas of the mine path subject to capping of less than 5 metres of non-slurried overburden, to the satisfaction of the Director-General, in consultation with the DPI and DNR.

Note: The success of woodland rehabilitation shall be based on agreed rehabilitation criteria to be included within the MOP and Flora and Fauna Management Plan. Criteria shall include vegetation condition and soil salinity.

- (b) Within 12 months of the date of this consent, the Applicant shall prepare, and subsequently implement, a Southern Mallee Offset Strategy for the development to the satisfaction of the Director-General. This strategy shall:
 - i. describe the compensatory vegetation proposal;
 - ii. justify why the proposed area(s) is suitable for the compensatory vegetation proposal;
 - iii. establish baseline data for the existing habitat in the proposed area(s);
 - iv. describe how the compensatory vegetation proposal would be implemented;
 - v. set completion criteria for the compensatory vegetation proposal;
 - vi. describe how the performance of the compensatory vegetation proposal would be monitored over time; and
 - vii. describe how conservation of the compensatory vegetation proposal would be secured over the long term.

3.5 Prevention of Soil Erosion

- (a) ⁹All works involving soil or vegetation disturbance shall be undertaken with adequate measures to control and minimise soil erosion and the entry of sediments into any river, lake, waterbody, wetland or groundwater system.
- (b) The Applicant shall prepare and submit to the EPA, DMR and the Director-General for review, prior to the commencement of the construction, an Integrated Erosion and Sediment Control Plan. The Plan shall be prepared and implemented, for any particular aspect of development prior to the commencement of construction or mining operations.

The Integrated Erosion and Sediment Control Plan shall include but not be limited to:

- (i). details of temporary and permanent sediment and erosion control systems to be used during both mine construction and operation, including for earthworks associated with landscaping;
- (ii). details of salinity management;
- (iii). measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The Plan should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing) or its latest version;
- (iv). measures developed and implemented to mitigate the impacts of stormwater runoff from the site following the completion of construction activities. The Plan should be consistent with the

⁹ DLWC General Terms of Approval

- guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA) or its latest version;
 - (v). details of the proposed measures to maximise the retrieval of topsoil for subsequent use in the rehabilitation program;
 - (vi). consideration and management of erosion and sedimentation of surface watercourses/waterbodies, including all creeklines within the DA areas;
 - (vii). measures to construct banks, channels and similar works to divert stormwater away from disturbed and contaminated land surfaces such as mine workings, haul roads, overburden disposal areas, ore handling areas and wastewater treatment facilities. All diversion banks, channels and points of discharge must be constructed or stabilised so as to minimise erosion and scouring;
 - (viii). a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved Plan, and EIS.
 - (ix). details of the management of soil stockpiles, erosion protection and long term viable use (where immediate use is not possible), soil stripping techniques and scheduling; and
 - (x). a program for reporting on the effectiveness of the soil stripping methods and performance against objectives contained in the EIS.
- (d) Sedimentation dams or other siltation control devices must be constructed to contain or treat surface water runoff from all areas disturbed by mining including overburden dumps, topsoil stockpiles, unsealed roads and areas cleared of vegetation. Sedimentation dams must be designed:
- to provide, to the satisfaction of the DLWC, a minimum dam capacity appropriate to the area draining to each dam;
 - so that the maximum flow velocity through the dams meets DLWC guidelines;
 - to prevent short circuiting; and
 - if inflow is likely to contain oil or other deleterious floating matter a baffle must be installed at the outlet to prevent discharge of that matter.

3.6 Site Rehabilitation Management

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

3.7 Visual Amenity and Landscaping

- (a) Buildings and structures shall be designed and constructed so as to present a neat and orderly appearance and to blend as far as practicable with the surrounding landscape;
- (b) Trees and/or shrubs shall be planted in areas where views of Project works (including the highway access road) are visible from public viewpoints (including Nob Road and local residences);
- (c) 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.
- (d) Should the Applicant and / or landowner dispute the level of adverse impact or any proposed mitigation measures from subclause (c) above, then either party may refer the matter to the Director-General in consultation with WSC. If the matter cannot be resolved within 21 days, the matter shall be referred to an Independent Dispute Resolution Process. The decision of the Independent Dispute Resolution Process shall be final, as agreed by the Director-General.

3.8 Bushfire and other Fire Controls

The Applicant shall:

- (a) 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;
- (b) prior to commencement of mining operations prepare a Bushfire Management Plan for all its holdings contained in the DA, to the satisfaction of WSC and the Rural Fire Service.

3.9 **Land Management**

- (a) The Applicant shall, prior to commencement of construction prepare a Land Management Plan 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, WSC, 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) control of weed infestation on topsoil stockpile material;
 - (iv) livestock access management;
 - (v) eradication of vermin and noxious weeds; and
 - (vi) feral animal control;
- (b) The Applicant shall minimise the removal of trees and other vegetation from the proposed surface facilities area, and restrict any clearance to the areas occupied by mine activity, buildings and paved surfaces, and those areas necessary for fire control in accordance with WSC requirements.

3.10 **Adjoining Properties**

The applicant shall regularly consult with adjoining property owners to ensure property management issues including maintenance of common fences, site weed control measures and bushfire management are coordinated. Details of consultation are to be reported in the AEMR.

4. **Water Management and Monitoring**

Notes:

1. ¹⁰The applicant must obtain all necessary approvals under the *Water Act 1912* from DLWC for water extraction and the provision of structures prior to mining operations commencing.
2. ¹¹An approval by DLWC will only be granted to the occupier, as defined in the *Water Act 1912* of the lands where the works are located or used, unless otherwise allowed or authorised under the *Water Act 1912*.
3. ¹²When DLWC grants an approval, it may require any existing approvals held by the Applicant relating to the land subject to this consent to be surrendered or let lapse.
4. ¹³All works subject to an approval under the *Water Act 1912* shall be constructed, maintained and operated in a responsible manner that will minimise the possibility of damage being occasioned by them, or resulting from them, to any public or private property, and to ensure public safety.
5. ¹⁴The Applicant must, prior to construction of all dams and embankments which fall within the provisions of the *NSW Dams Safety Act*, obtain approval from the NSW Dams Safety Committee. All licensed works that are referable under the *NSW Dams Safety Act* shall be constructed and maintained in accordance with the provisions of that Act.
6. ¹⁵The Applicant must obtain all necessary approvals from DLWC under Part 3A of the *Rivers and Foreshores Improvement Act 1948* for any works subject to such an approval.

¹⁰ DLWC General Terms of Approval

¹¹ DLWC General Terms of Approval

¹² DLWC General Terms of Approval

¹³ DLWC General Terms of Approval

¹⁴ DLWC General Terms of Approval

¹⁵ DLWC General Terms of Approval

4.1 Water Management

i. Site Water Management Plan

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

- Site water balance;
- management of the quality and quantity of surface and ground water within the areas covered by the Water Management Plan;
- measures to prevent the quality of any surface/ ground waters being degraded due to the operation of the mine workings;
- the installation of a network of monitoring bores as required to monitor impacts on groundwater aquifers;
- details of water makeup and storage on site, including contingencies in the event of very wet or dry conditions occurring. This must provide a water balance for mine water demand;
- measures to ensure that poorer quality class waters are effectively reused on the site including consideration of segregation of waters based on salinity classes and other levels of contamination;
- details of any licensing requirements for any extractions, storages, or other constructions on the site;
- projection of potential groundwater changes during mining (short term) and post mining (long term) with particular attention given to the affect of changes to groundwater quality and mobilisation of salts;
- a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plans, and EIS.

ii. Prevention of pollution of waters

- (a) ¹⁶Except as may be expressly provided by a licence under the *Protection of the Environment Operations Act 1997* in relation of the development, section 120 of the *Protection of the Environment Operations Act 1997* must be complied with in connection with the carrying out of the development.
- (b) ¹⁷Waste water from the mining process must not be discharged onto adjoining roads, crown land or other persons land, any river, creek or watercourse, groundwater aquifer, any area of native vegetation or any wetlands, unless otherwise authorised by a license under the *Protection of the Environment Operations Act 1997*.

iii. Perimeter Bunds

Any bunds shall be designed for, amongst other things, toe stability; forces from flooding, hydraulic pressures, seepage, attack from burrowing fauna and revegetation.

iv. Road Drainage Crossings

Erosion of the bed and banks upstream and downstream of the crossings shall be prevented with suitable scour protection.

4.2 Water Supply

i. Darling River Water Extraction

The Applicant shall not extract water from the Darling River except in the event of a failure of the on-site borefield supply, or as otherwise approved by the Director-General. Water shall only be extracted in accordance with a

¹⁶ EPA General Terms of Approval

¹⁷ DLWC General Terms of Approval

licence from DIPNR under the *Water Act 1912* or the *Water Management Act 2000*.

ii. Requirements for the licence under Part II of the *Water Act 1912*.

- (a) ¹⁸The Applicant must provide to DLWC a detailed plan of the location of the new works to be installed that require licensing and the path followed by the pipeline;
- (b) ¹⁹Extraction of water under the approval to be issued shall be subject to any conditions attaching to entitlements, to availability of supply, and such restrictions as are deemed necessary by the DLWC from time to time to ensure an adequate flow remains for other water users and the environment (unregulated streams).
- (c) ²⁰If and when required by the DLWC, suitable devices must be installed to accurately measure the quantity of water extracted or diverted by the works. All water measuring equipment must be adequately maintained. It must be tested as and when required by DLWC to ensure its accuracy. If required by DLWC, the extraction and use of water must be recorded and reported as specified by DLWC.
- (d) ²¹All diversion works shall be constructed or installed so as not to obstruct the reasonable passage of floodwaters flowing in, to or from a river.
- (d). ²²The existing profile of the channel and bank of any watercourse or drainage depression must not be disturbed any more than is necessary to construct and maintain the authorised diversion work. Any area that is disturbed by the construction of the work shall be stabilised to prevent erosion in a manner acceptable to DLWC.

iii. Requirements for the license under Part 5 of the *Water Act 1912*

- (a) ²³The Applicant must prepare a Borefield Impact Management Plan (BIMP) in consultation with the DLWC and the local residents, and to the satisfaction of DLWC and the Director-General, prior to the commencement of construction of the borefield. The Plan is to include, but not necessarily be limited to:
- a detailed monitoring programme;
 - trigger levels for commencement of preventative action;
 - remedial action, including, but not limited to, mitigation/compensatory measures generally providing for:
 - an outline of the process and consultations undertaken in preparing the Plan
 - bore/well reconditioning
 - alternative water supplies
 - private agreements between Applicant and landholders
 - an independent dispute resolution process for proposed mitigation measures (refer also sub-clause (p) below), and
 - groundwater sustainability.
- (b) A copy of the BIMP shall be forwarded to WSC within 14 days of acceptance by the Director-General and DLWC.
- (c) ²⁴Works for the construction of bores must be completed within such a period as specified by DLWC.
- (d) The Applicant shall install to the satisfaction of the DLWC, in respect of location, form, type and construction, an appliance to measure the quantity of water extracted from the works. The appliance is to consist of a meter with automatic recording device, or such other means of measurement as may be approved by the DLWC. The appliance is to be maintained in good working order and condition. A record of all water extracted from the works is to be kept and supplied to the DLWC on request. The Applicant,

¹⁸ DLWC General Terms of Approval

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²¹ DLWC General Terms of Approval

²² DLWC General Terms of Approval

²³ DLWC General Terms of Approval

²⁴ DLWC General Terms of Approval

when requested, must supply a test certificate as to the accuracy of the appliance furnished by the manufacturer, or by some person duly qualified to do so.

- (e) ²⁵The Applicant must record pumping and non-pumping water levels at least twice each year and report the results with the annual groundwater return.
- (f) ²⁶Within two months after the works are completed, the DLWC shall be provided with an accurate plan of the location of the works and notified of the results of any pumping tests, water analysis, and other details as are specified in the approval from the DLWC.
- (g) ²⁷At all times, the works shall be located at least:
- 200 metres from any boundary of the property, except when specifically authorised by DLWC.
 - 400 metres from any irrigation bore on any adjoining property
 - 500 metres from any town water supply bore
 - 400 metres from any DLWC observation bore
 - 40 metres from the nearest bank of any river or creek
- (h) ²⁸The Applicant shall allow the DLWC or any person authorised by it, full access to the works, either during or after construction, for the purpose of carrying out inspections or tests of the works and its fittings. The Applicant is to carry out work or alterations deemed necessary by the DLWC for the protection or proper maintenance of the works, or the control of water extracted and for the protection of the quality and the prevention from pollution or contamination of sub-surface water.
- (i) ²⁹All works shall be constructed and maintained to properly control the water extracted to prevent wastage or any reduction in quality of the sub-surface water. The DLWC may direct that any necessary repairs or alterations be undertaken to maintain the works in good working order.
- (j) ³⁰If a supply of useable water is obtained, DLWC must be notified and the bores suitably lined and capped to the standard required by DLWC.
- (k) ³¹Any saline or polluted water located above a producing aquifer must be sealed by the use of cemented casing as specified by DLWC.
- (l) ³²Any water extracted by the works must not be discharged into any watercourse or groundwater if there is a likelihood of pollution of that water.
- (m) ³³DLWC has the right to vary the volumetric allocation or the rate at which the allocation is taken in order to prevent the overuse of an aquifer.
- (n) Prior to the finalisation of any agreement with respect to any mitigation measure proposed, the DLWC is to be consulted to ensure that its statutory and natural resource management responsibilities have been complied with.
- (o) If required by the Director-General, the Applicant shall fund an independent review of the draft BIMP to be undertaken by an independent expert appointed by the Director General in consultation with DLWC and Applicant. Any such review shall be considered by the Director General and DLWC prior to any approval of the BIMP.
- (p) The Bore Licence is to be advertised in accordance with *Part 5 of the Water Act, 1912*. As the BIMP is a condition of the Licence, copies are to be made available for comment at DLWC Offices and the

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Wentworth Shire Council Office. The applicant is to provide notice of the advertising and a copy of the BIMP to landholders within a 10km radius of the Borefield.

- (q) In any impact mitigation process undertaken under the BIMP, the quantity, quality and security of the water supplied as a result of that process is to be at least of the same standard as the water supplied from the bore before it was affected by the Applicant's borefield, or as otherwise agreed to by the landholder and the Applicant. In the case that agreement on proposed mitigation measures cannot be reached by the relevant parties, the independent dispute resolution process detailed in the BIMP is to be followed. The independent dispute resolution process is to consider and incorporate in the resulting decision any relevant DLWC statutory and natural resource management responsibility where relevant. The decision resulting from the independent dispute resolution process is final.
- (r) In the event that the development adversely affects groundwater users the Applicant shall, to the satisfaction of the DLWC, initiate the provisions of the BIMP.
- (s) In the event that the mine adversely affects existing or licensed groundwater users, the Applicant shall, to the satisfaction of the DLWC, liaise with the users to provide a replacement water supply of similar quality and quantity to that affected, until such time as the development ceases to impact on the users' water supply.
- (t) The Applicant shall supply the Murray/Murrumbidgee Region of DIPNR with an annual water extraction report detailing each years water extraction and usage for the life of the mining operation. If the Applicant extracts additional groundwater from that estimated in the EIS, the Department may request the Applicant to undertake a Groundwater Impact Assessment to the satisfaction of the Department to ensure there are no adverse impacts from the additional extraction.

iv. Permit under Part 3A of the Rivers and Foreshores Improvement Act 1948

- (a). ³⁴The Applicant must lodge design information and specifications for any works subject to this approval. The designs must be consistent with any appropriate standard set by the DLWC and must be approved prior to a 3A permit under the Rivers and Foreshores Improvement Act being issued;
- (b). ³⁵Stabilisation works shall be adequately tied into existing banks to prevent under or back cutting occurring;
- (c). ³⁶Operations are to be conducted in such a way that there is no diversion of the stream from the existing alignment;
- (d). ³⁷Operations shall be conducted in such a manner as not to cause damage or increase erosion of the adjacent banks;
- (e). ³⁸No materials are to be used that may pollute the river or that may create a risk to public safety;
- (f). ³⁹If in the opinion of any responsible officer of DLWC any work is carried out in such a manner as it may damage or detrimentally affect the watercourse, or damage or interfere in any way with any work, the operation on that section of the said stream shall cease forthwith upon written or oral direction of such officer;
- (g). ⁴⁰The Applicant and the owner or occupier of the land are responsible for any excavation or soil removal undertaken by any other person or company at the site.

³⁴ DLWC General Terms of Approval

³⁵ DLWC General Terms of Approval

³⁶ DLWC General Terms of Approval

³⁷ DLWC General Terms of Approval

³⁸ DLWC General Terms of Approval

³⁹ DLWC General Terms of Approval

⁴⁰ DLWC General Terms of Approval

4.3. Water Monitoring

Surface and groundwater

- (a) The Applicant shall construct and locate surface and groundwater monitoring positions, as identified in the Site Water Management Plan (Condition 4.2(a)) to the satisfaction of the Director-General and DLWC, prior to the commencement of mining operations works. Particular regard shall be paid to the project's impact on groundwater quantity and quality and surface water quality and quantity and the options to minimise any identified adverse impacts; and
- (b) ⁴¹For each monitoring/discharge point or utilisation area specified below (by a point number), the Applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1 of Tables 1 and 2. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

Table 1. Point 2 - Groundwater monitoring bores on the premises

Pollutant	Units of measure	Frequency	Sampling Method
Level	Metres	Monthly	Inspection
Total Dissolved Solids	mg/l	monthly	Representative sample

Note: In the table above, the monitoring bores refer to the 5 monitoring wells on the premises described in the EIS.

Table 2. Point 3 - Groundwater monitoring bores outside the premises

Pollutant	Units of measure	Frequency	Sampling Method
Level	Metres	Monthly	Inspection
Total Dissolved Solids	mg/l	monthly	Representative sample

Note: In the table above, the monitoring bores refer to the 5 monitoring wells outside the premises described in the EIS.

- (c) ⁴²Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area required by condition 9.3.1(e) must be done in accordance with:
- (i) The approved methods publication; or
 - (ii) If there is no methodology required by the *approved methods publication*, these conditions of consent or in the licence under the *protection of the environment operations act 1997* in relation to the development or the relevant load calculation protocol, a method approved by the EPA in writing before any tests are conducted;
- (d) The results and interpretation of surface and groundwater monitoring are to be reported in the AEMR. The Applicant shall also provide DLWC with an electronic copy of all monitoring results, if requested.

4.4 Initial Water and Residue Dams

- (a) The applicant must consult with the DLWC and DMR in relation to any dam construction proposed at the site.

5. Waste Management and Hazardous Materials

5.1 Waste management

5.1.1 Overburden management

- (a) The Applicant shall ensure that areas subject to slurried overburden placement are covered with a minimum of 3 metres of non-slurried material.
- (b) Prior to undertaking any slurried overburden placement, the Applicant must have obtained approval for

⁴¹ EPA General Terms of Approval

⁴² EPA General Terms of Approval

an updated Site Water Management Plan, Integrated Erosion and Sediment Control Plan and Land Management Plan.

Note: The updated Site Water Management Plan shall include the mitigation measures identified in the letter from Australian Tailings Consultants to Bemax Resources, dated 11 January 2006.

5.1.2. Receiving or Disposing of Waste

- (a) ⁴³The Applicant must not except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*:
- receive any waste at the premises for storage, treatment processing or disposal; or
 - dispose of any waste on the premises.
- (b) ⁴⁴This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an Environment Protection Licence under the *Protection of the Environment Operations Act 1997*. The Applicant shall make arrangements for the disposal of domestic waste at a licensed landfill.

5.1.3. Domestic Waste

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

5.1.4. Sewerage and Associated Waste

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

5.1.5. Landfill Waste

• Landfill Environmental Management Plan

- (a) ⁴⁵Prior to landfilling any waste containing radioactive substances, the Applicant shall prepare (and following approval implement) a Landfill Environmental Management Plan, to the satisfaction of the DEC and the Director-General. The plan must be endorsed by a radiation consultant whose appointment has been approved by the DEC, and must:
- (i) be consistent with the requirements of the Commonwealth's *Code of Practice and Safety Guide Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing, 2005*;
 - (ii) describe the proposed methods and procedures for storage, handling, mixing and disposing waste containing radioactive substances;
 - (iii) include occupational health and environmental radiation impact assessment criteria; and
 - (iv) include a detailed occupational health and environmental radiation monitoring program.
- (b) ⁴⁶The applicant must ensure that only the following types of waste are disposed of at the premises:

Type of Landfill	Wastes able to be disposed
Solid/Inert Waste Landfill	1. Waste generated outside the premises from the processing of mineral concentrates produced at the premises; AND 2. Waste that is assessed as inert waste, following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines or that is specified as inert waste, in schedule 1 of the <i>Protection of the Environment Operations Act 1997</i>,

⁴³ EPA General Terms of Approval

⁴⁴ EPA General Terms of Approval

	except putrescible waste unless specifically permitted by the licence; OR 3. Waste that is assessed as solid waste on the basis it contains salts from the premises and except for this salt component would be classified as inert waste, following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines or that is specified as inert waste, in schedule 1 of the <i>Protection of the Environment Operations Act 1997</i>; OR 4. Waste that is assessed as industrial waste or hazardous waste on the basis it contains radioactive substances from the premises and except for this radioactive component would be classified as inert waste, following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines or that is specified as inert waste, in schedule 1 of the <i>Protection of the Environment Operations Act 1997</i>. <i>Note: Wastes permitted to be disposed at the premises must comply with item 1. in this table and at least one other item in the table, either item 2. or item 3. or item 4.</i>
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- (c) ⁴⁷Wastes must be landfilled in a manner to ensure:
- (i) the average concentration of radioactive material in landfill at the premises will not exceed the average concentration of radioactive material in the original orebody; and
 - (ii) the radiation level of any material deposited to land is no greater than 0.7 microGray per hour measured 1 metre vertically above the surface of the material being deposited; and
 - (iii) there will be no detectable change from the original natural background radiation level measured at the ground surface.
- (d) ⁴⁸Wastes must be landfilled in a manner to ensure that the topsoil of the landfilled area has an average salinity level no greater than the average salinity level of topsoil in other parts of the premises.

5.2 Hazards and Risk Management

- (a) At least one (1) month prior to the commencement of the construction phase, the Applicant shall submit for the approval of the Director-General a program for the implementation of the recommendations contained within the Preliminary Hazard Analysis (Appendix I of the EIS). Where a recommendation requires a study or action plan to be prepared, the Applicant shall ensure that the study/action is completed and fully implemented from the commencement of the date of the relevant activity. Where the Applicant decides not to implement a recommendation in the Preliminary Hazard Analysis or any subsequent studies/action plans, the Applicant shall submit justification for the decision together with any alternatives and seek approval from the Director-General for the change.
- (b) At least one (1) month prior to the commencement of the construction phase, a comprehensive Safety Management System (SMS), developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.9, "Safety Management"* and covering all operations on-site and associated transport activities involving hazardous materials. The SMS shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures.
- (c) The Applicant shall adopt the risk prevention and remedial measures as nominated in the EIS.
- (d) The storage of diesel should be in accordance with the requirements of WorkCover NSW and the relevant Australian standards. In particular, the storage tanks should be bunded in accordance with the Australian Standard 1950.
- (e) Bund(s) must be installed around areas in which fuels, oils and chemicals are stored. Bunds must:
- (i) have walls and floors constructed of impervious materials;
 - (ii) be of sufficient capacity to contain 110% of the volume of any tank (or 110% volume of the largest tank where a group of tanks are installed);
 - (iii) have walls not less than 250 millimetres high;
 - (iv) have floors graded to a collection sump; and
 - (v) not have a drain valve incorporated in the bund structure.
- (f) A waste water treatment facility with oil separator and sediment trap must be installed to treat drainage

from any hardstand, vehicle servicing, and general workshop areas,

- (g) The applicant is required to store all oils and grease from equipment maintenance in leak proof containers within a bunded area until collected by a licensed recycling contractor; and
- (h) All activities must be undertaken in a manner which ensures efficient use of water and which maximises reuse of water.

5.2.1 Emergency Services Cooperation Agreement

- (a) Prior to the commencement of construction, the Applicant shall develop an Emergency Services Cooperation Agreement in consultation with State Emergency Services and bushfire fighting services in the area. The Agreement shall provide, but not necessarily be limited to:
 - (i) Policies and procedures for the ongoing supply of hazards information related to the Project to the state emergency services and bushfire fighting services (including quantities and locations of dangerous goods inventories and possible hazardous events at associated with the development);
 - (ii) Policies and procedures for communication with the state emergency services and bushfire fighting services and notification in the event of an emergency;
 - (iii) Details of any agreement for the provision of firefighting/emergency response equipment from the Project in the event of a bushfire or emergency;
 - (iv) Details of any agreement for access to water stores at the development in the event of a bushfire; and
 - (v) Details of any agreement for the provision of suitably qualified employees from the Project in the event of a bushfire or emergency.
- (b) The Applicant shall supply a copy of the Emergency Services Cooperation Agreement to the Director-General within 14 days of the Agreement being reached.

Note: The development consent conditions under 5.2 are related to offsite risk to people and the biophysical environment. The safety of all persons and operations on site is the responsibility of DMR under the Mines Inspection Act and Dangerous Goods Act. The consent conditions under 5.2 are exclusive in scope of any mining activity which is the statutory responsibility of DMR under the Mining Act, 1992. Consideration of such mining activities may be included in the required reports for completeness, although these activities shall not be the subject of approval by the Director-General.

5.2.2 Hazards Monitoring

⁵⁶The Applicant must monitor (by sampling and obtaining results by analysis) the concentration of the pollutant specified in Column 1 for the monitoring points specified below. The Applicant must use the sampling method, unit of measure, and sample at the frequency, specified opposite in the other columns:

Stockpiles of mineral concentrate

Pollutant	Units of measure	Frequency	Sampling Method
Radiation	Becquerels per gram	Every 3 months	Special method 1

Stockpiles of non-magnetic mineral concentrate

Pollutant	Units of measure	Frequency	Sampling Method
Radiation	Becquerels per gram	Every 3 months	Special method 1

Stockpile/s of back-loaded waste from the MSP

Pollutant	Units of measure	Frequency	Sampling Method
Radiation	Becquerels per gram	Every 3 months	Special method 1

Note: Special Method 1 means analysis by quantitative gamma spectrometry of a composite sample of mineral concentrate, with the analysis reported as specific activity for each gamma-emitting radionuclide in the sample tested.

6. Air Quality and Noise Management

6.1 Air Quality Management and Monitoring

- (a) The Applicant shall manage the Project so as to satisfy the relevant EPA air quality criteria for dust deposition. The relevant criteria are contained in Table 3 below.

Table 3. NSW EPA Amenity Based Criteria for Dust Fallout

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

- (b) ⁴⁵Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.
- (c) The Applicant shall, prior to the commencement of construction and mining operations, prepare a Dust Management Plan detailing air quality safeguards and procedures for dealing with dust emissions from the Project to the satisfaction of the Director-General. The Plan shall be updated as required by the Director-General. The Plan shall include, but not be limited to, details of:
- (i) protocol for dust suppression on all exposed surfaces;
 - (ii) the identification of dust affected properties and the relevant dust limits consistent with the EIS and any subsequent submissions to the Department;
 - (iii) specifications of the procedures for the dust monitoring program for the purpose of undertaking independent dust investigations;
 - (iv) outline the procedure to notify property owners and occupiers likely to be affected by dust from the mine;
 - (v) the establishment of a protocol for handling dust complaints that include recording, reporting and acting on complaints;
 - (vi) outlining mitigation measures to be employed to minimise dust emissions;
 - (vii) equipment to be available and used to control dust generation;
 - (viii) a reactive management strategy to control dust emissions such as the selective rescheduling of operations during the construction phase during adverse operations;
 - (ix) methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions, particularly from surface activities if the relevant criteria are exceeded;
 - (x) identification of longer term strategies directed towards mitigating dust levels that exceed the relevant EPA dust amenity criteria;
 - (xi) details of locations for dust monitoring and deposition gauges at the residential areas and frequency of monitoring, as agreed with the EPA; and
 - (xii) a program to continue baseline monitoring undertaken prior to development consent.
- (d) The Applicant shall ensure agricultural activities on properties adjacent to the Mine and the Minerals Concentrate Transport Route are not adversely affected by dust generated by the Project. Should agricultural activities be affected, the Applicant shall identify measures to remediate this impact in consultation with the lease holders of the affected property;
- (e) The Applicant shall:
- (i) establish dust deposition monitoring locations for the mine operations and transport along the highway access road for impacts of dust at the nearest non-mined owned residences, and locations as may be determined to be necessary by the Director-General in consultation with the EPA; and
 - (ii) provide all results and analysis of air quality monitoring in the AEMR including a determination

⁴⁵ EPA General Terms of Approval

of the dust deposition rate in g/m²/month, which shall be reported in the AEMR.

- (f) Monitoring of dust deposition in ambient air must be carried out at locations agreed to in consultation with the EPA. The sampling method, units of measure, interval and frequency of monitoring will be as set out in the (Draft) *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* or its latest version. Monitoring requirements shall be reviewed 2 years from the date of this consent to the satisfaction of the Director-General in consultation with the EPA.
- (g) In the event that a landowner or occupier considers that dust emissions from the mining operations at their dwelling are in excess of the relevant EPA dust amenity criteria, and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request:
- (i) consult with the landowner or occupants affected to determine their concerns;
 - (ii) make arrangements for appropriate independent dust investigations by a specialist appointed by the Director-General and paid for by the Applicant, in accordance with the Dust Management Plan, to quantify the impact and determine the source of the effect;
 - (iii) modify the mining activity in accordance with the Dust Management Plan if exceedences are demonstrated to result from the mine related activity. This shall include:
 - introduction of additional controls or modification of operations, to ensure that the dust criteria are achieved; and/or
 - enter into an agreement with the landowner or provide such forms of benefit or amelioration as may be agreed between the parties as providing acceptable compensation for the dust levels experienced;
 - (iv) conduct follow up investigations to the satisfaction of the Director-General, where necessary.
- (h) Further independent investigations shall cease if the Director-General is satisfied that the relevant consent limits or relevant EPA dust amenity criteria are not being exceeded and are unlikely to be exceeded in the future.
- (i) The Applicant must monitor (by sampling and obtaining results by analysis) the concentration of the pollutants specified in Column 1 at monitoring points acceptable to the DEC. The Applicant must use the sampling method, unit of measure, and sample at the frequency, specified opposite in the other columns.

Four dust deposit gauges/sites at locations acceptable to DEC

Pollutant	Units of measure	Frequency	Sampling Method
Radiation	Becquerels per gram	Every 6 months	Special method 1, or other method acceptable to DEC
Particulate Deposited Matter	g/m ² /month	Monthly	Australian standard 3580.10.1-1991

Note: Special Method 1 means analysis by quantitative gamma spectrometry of a composite sample of material, with the analysis reported as specific activity for each gamma-emitting radionuclide in the sample tested.

6.2 Noise

6.2.1. Noise level criteria

- (a). The Applicant shall ensure that the noise emissions from the operation of the mine and associated activities shall not exceed the noise limits in Table 4 below at all non-project related residences.

Table 4. Noise Levels (Day and Night)

Night time Noise limit LAeq dB(A) (10pm to 7am)	Day time Noise Limit LAeq dB(A) (7am to 10pm)
35	35

Note: The noise limit criteria in Table 4 apply in accordance with the specifications and requirements of the NSW EPA Industrial Noise Policy.

- (b). In the event that a landowner or occupier of a non-mined owned property considers that noise from the Project at their dwelling is in excess of the noise levels in Table 4, and the Director-General is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request from the landowner:
- i. consult with the landowner or occupants affected to determine their concerns;
 - ii. make arrangements for, and bear the costs of, following consultation as far as reasonably practicable with other mine operations in the vicinity where necessary, appropriate independent noise investigations to the satisfaction of the Director-General, to quantify the impact and determine the source of the effect and the contribution of the Project to the effect;
 - iii. if exceedences are demonstrated by the investigation to result in part from the mine related activity. This shall include:
 - 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 are achieved;
 - seek agreement of the landowner to undertake noise mitigation measures at the dwelling to achieve the acceptable internal noise levels;
 - seek agreement of 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.
- (c). 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 WSC. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.
- (d). Further independent investigations shall cease in the Director-General is satisfied that the relevant criteria are not being exceeded and are unlikely to be exceeded in the future.

6.2.2 Noise Management Plan

- (a) The Applicant shall, prior to commencement of construction, prepare a Noise Management Plan for the construction and operation of the Project, and for traffic noise associated with the Project along the Minerals Concentre Transport Route. The Plan is to be prepared in consultation with WSC and to the satisfaction of the Director-General. The Plan shall include, but not be limited to:
- (i). detail management measures where the target criteria in Table 4 of this consent are predicted to be exceeded, or are exceeded during Mining Operations. These measures should include but not be limited to:
 - proposals for the 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.
 - (ii) measurement of the meteorological conditions (ie wind speeds, wind direction, wind height and temperature inversions) to determine the prevailing weather conditions relevant for assessing noise levels and criteria under this consent for the Project in accordance with the NSW EPA Industrial Noise Policy;
 - (iii) specify the procedures for a noise monitoring program for the purpose of undertaking independent noise investigations;

- (iv) 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;
- (v) record appropriate mechanisms for community consultation;
- (vi) outline proactive/predictive and reactive mitigation measures to be employed on the site to limit noise emissions;
- (vii) details of proposals to limit road transport noise, including an outline of an education and training program to avoid exhaust braking at night in built up areas and in the vicinity of homesteads along the highway access road;
- (viii) outline measures to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms);
- (ix) 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.

7. Transport and Utilities

7.1 Road Transport

- (a) The Applicant shall prepare a Traffic Code of Conduct for all haulage vehicles associated with the Ginkgo Project operating within the Wentworth Shires prior to commencement of construction and to the satisfaction of WSC, in consultation with the Director-General, requiring these haulage vehicles to comply with the Code. The Code shall include, but not be limited to:
 - (i) operators conforming to designated haulage routes;
 - (ii) hours of operation;
 - (iv) speed limits;
 - (v) vehicle maintenance;
 - (vi) load coverage;
 - (vii) behavioural requirements;
 - (viii) measures to incorporate the road noise management measures required by the condition 6.2.2; and
 - (ix) protocols with school bus operations

The Code of Conduct shall also include measures that will be undertaken by the Applicant in the event it is established that haulage vehicles have not complied with the Code.

- (b) The Applicant is to include reports of violations of this condition in its AEMR and to observe any requirements of the Director General regarding the implementation of this condition.
- (c) The route to be taken by all restricted access vehicles such as B Doubles type and Road Train type shall conform to the designated routes as prescribed under the Roads Act 1993, and cited as "General Notice for the Operation of B Doubles 1996" (or its latest version), and General Notice for the Operation of Road Trains 1996" (or its latest version).

7.2 Road Works to be undertaken

- (a) The Applicant shall prepare a road construction program detailing the timing and scheduling of road construction required by these conditions to reflect the level of Project construction and operation activity and associated road usage. The program shall be prepared in consultation with WSC and to the satisfaction of the Director-General, prior to commencement of construction.
- (b) All works to be undertaken on public roads, as detailed in the EIS and the modification application MOD-14-3-2003 and accompanying Statement of Environmental Effects, dated February 2003 and prepared by Resource Strategies Pty Limited, shall be at the expense of the Applicant.
- (c) The Applicant shall enter into an appropriate agreement with Council regarding the construction and maintenance of the road from the mine site to the Silver City Highway.

- (d) Prior to any work on a Crown public road the Applicant must supply written correspondence from WSC to DLWC giving an undertaking that WSC will formalise a road opening under the Roads Act 1993. Any such road must be formally transferred to Council before any work is undertaken on the road in question.

7.3 Submission of Engineering Plans for Roadworks

- (a) Prior to any work commencing within a public road reserve located within Wentworth Shire local government area, the Applicant shall submit for the approval of WSC, detailed engineering design drawings of intended works. The drawings are to be accompanied by associated sediment control plans, environmental management plans, work method statements and traffic control plans.
- (b) Road and intersection designs are to be in accordance with the RTA's "Road Design Guide" 1999 (or its latest version) and/or AUSTROADS - Guide to Traffic Engineering Practice series.
- (c) Detailed engineering drawings and specifications shall be in accordance with WSC requirements as applicable, and/or AUSTROAD Specifications.
- (d) Traffic Control Plans are to be in accordance with Australian Standard 1742.3 and/or the RTA's Manual "Traffic Control at Work Sites", 1998 (or its latest version).
- (e) All required road signs, guide posts and other road-side furniture shall be designed and installed by the Applicant in accordance with Australian Standard 1742 and Australian Standard 1743 (or their latest versions).

7.4 Road Maintenance

- (a) The Applicant shall enter into a Road Maintenance Agreement with WSC for the haulage route from the Silver City Highway to the mine site. The Agreement shall include a requirement for a joint inspection every six months, or as agreed by WSC as relevant, following completion of the road upgrade, to determine and assess as to whether maintenance is required, and to stipulate that should maintenance be required and not be carried out within one month of the inspection, the WSC as applicable, will be entitled to carry out such maintenance work at the Applicant's cost.
- (b) Notwithstanding sub clause 7.4 (a) above, the Applicant shall also enter into a Road Maintenance Agreement with WSC prior to commencement of construction, for other roads within the relevant Shires which are likely to be used by traffic to the Project site. The Agreement shall include: the requirement for a traffic monitoring and reporting process to be developed and implemented at the Applicant's expense, to identify the use of roads by mine traffic; and mechanisms to calculate contributions for road maintenance commensurate with mine traffic use as identified by traffic monitoring.

7.5 Project Attributable Stock Losses

The Applicant shall consult with relevant leaseholders and negotiate appropriate reimbursement at current market values for stock losses attributable to Project traffic or other Project activities.

7.6 Provision of utility services

- (a). Prior to the construction the Applicant shall consult with affected service authorities and make arrangements satisfactory to those authorities for the protection or relocation of services (such as transmission lines, pipelines, optic cables etc) prior to the commencement of Project construction.
- (b). The Applicant shall in consultation with WSC investigate the feasibility of improving mobile phone coverage in the area.

7.7 Transport of Hazardous Materials Plan

Prior to transporting any waste containing radioactive substances, the Applicant shall prepare (and following approval implement) a Transport of Hazardous Materials Plan, in consultation with the DEC, and to the

satisfaction of the Director-General. The plan must be consistent with the requirements of the Australian Radiation Protection and Nuclear Safety Agency's *Code of Practice for the Safe Transport of Radioactive Material*, and the *NSW Radiation Control Regulation 2003*.

Note: The plan may be prepared as part of the Safety Management System (see condition 5.2).

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 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 WSC 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 require approval from the relevant regulatory agencies to ensure the effectiveness and quality of the monitoring program. Only accredited laboratories shall be used for laboratory analysis.
- (c) Where agreement cannot be reached between the applicant and a landholder alternative arrangements are to be agreed with the Director-General and/or relevant regulatory authority.
- (d) The Applicant shall obtain land holder agreement for monitoring on private property.

8.1 Third Party Monitoring/Auditing for the Project

Independent Environmental Audit

- (a) Every three years from the commencement of construction of the mine, or as otherwise directed by the Director-General, the Applicant shall conduct an *Independent Environmental Audit* of the Project components 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 of the Director-General. Copies of the report shall be submitted by the Applicant to the Director-General, WSC, EPA, DLWC, DMR, NPWS and local residents within two weeks of the report's completion for comment
- (b) The audit shall:
 - (i) assess compliance with the requirements of this Consent, licence and approvals;
 - (ii) assess the development against predictions in the EIS;
 - (iii) review the effectiveness of the environmental management of the development, 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.
- (c) The Director-General may, after considering an audit report and any submissions made by the EPA, DLWC and WSC on the report, notify the Applicant of any reasonable requirements for compliance with this Consent. The Applicant shall comply with those requirements within such time as the Director-General may direct.

8.2 Hazard Audit

Twelve months after the commencement of the operation of the mine, or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive Hazard Audit of the Project and within one month of the Audit submit a report to the Director-General. The Audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to the commencement of the Audit. Further Audits shall be carried out every three years, or as required by the Director-General. Hazard Audits shall be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory paper No. 5 - Hazard Audit Guidelines*. The Hazard Audit shall include a review of the site Safety Management System and a review of all entries made in the incident register since the previous Audit. The

Applicant shall comply with the reasonable requirements of the Director-General in response to the findings and recommendations of the Audit.

9. Reporting

9.1 Reports on Operations

- (a) The Applicant shall report on mine operations in accordance with the Mine Operations Plan.
- (b) Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventative measures. That report must be submitted to the Director-General no later than 14 days after the incident or potential incident.
- (c) The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection by the Director-General at any time.

9.2 Environmental Reporting

9.2.1 Annual Environmental Management Report (AEMR)

- (a) The Applicant shall, throughout the life of the Project and for a period of at least three years after the completion of mining or processing operations, whichever occurs the later, prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of the Director-General. The AEMR shall review the performance of the operations against the Environmental Management Strategy, the conditions of this consent, and other licences and approvals relating to the operations. To enable ready comparison with the EIS's predictions, diagrams and tables, the report shall include, but not be limited to, the following matters:
 - (i) 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 and infrastructure in terms of EPA, DLWC, DMR and WSC requirements;
 - (iii) Results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person;
 - (iv) Identify trends in monitoring results over the life of the Project;
 - (v) An assessment of any changes to agricultural land suitability resulting from the Project, including cumulative changes;
 - (vi) A listing of any variations obtained to approvals applicable to the subject area during the previous year;
 - (vii) Rehabilitation report; and
 - (viii) Environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.
- (b) In preparing the AEMR, the Applicant shall:
 - (i) respond to any requests made by the Director-General or DMR for any additional requirements;
 - (ii) comply with any requirements of the Director-General, DMR 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 WSC and the EPA.
- (c) The Applicant shall ensure that copies of each AEMR are submitted at the same time to DUAP, EPA, DMR, DLWC, WSC, and made available for public information at WSC within fourteen days of submission to these authorities. A copy of the AEMR shall be made available to the Community Consultative Committee.

9.3 Recording and Reporting Requirements

9.3.1. Reporting conditions

- (a) ⁴⁶The applicant must provide an annual return to the EPA in relation to the development as required by any license 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 license conditions and provide a calculation of license 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.
- (b) ⁴⁷The results of any monitoring required to be conducted by the EPA'S general terms of approval, or a license under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions 9.3.1(c) and 9.1.3 (d)
- (c) ⁴⁸All records required to be kept by the license 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.
- (d) ⁴⁹The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;
 - (i) the time(s) at which the sample was collected;
 - (ii) the point at which the sample was taken; and
 - (iii) the name of the person who collected the sample.

9.3.2 General Conditions

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.

10. Community Consultation/Obligations

10.1 Community Consultation

Prior to construction the Applicant shall prepare and submit a Community Consultation Plan, outlining proposed mechanisms for on-going consultation with local residents.

10.2 Complaints

The Environmental Officer shall be responsible:

- (a) For recording complaints with respect to the operations on a dedicated and publicly advertised telephone line, 24 hours a day, 7 days a week, entering complaints or comments in an up-to-date log book, or other suitable data base, and ensuring that a response is provided to the complainant within 24 hours;
- (b) Providing a report of complaints received every six months throughout the life of the project to the Director-General, EPA, DLWC, DMR and WSC or as otherwise agreed by the Director-General. A summary of this report shall be included in the AEMR.

⁴⁶ EPA General Terms of Approval

⁴⁷ EPA General Terms of Approval

⁴⁸ EPA General Terms of Approval

⁴⁹ EPA General Terms of Approval

11. Further Approvals and Agreements

11.1 Statutory Requirements

The Applicant shall ensure that all statutory requirements including but not restricted to those set down by the Local Government Act 1993, 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 WSC, EPA, DMR, NPWS, DLWC, RTA and NSW Agriculture are fully met.

11.2 Structural Adequacy

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

11.3 Verification Of Construction

- (a) 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:
 - (i) Footings;
 - (ii) Concrete structures, including ground floor and any subsequent floors, retaining walls and columns;
 - (iii) Framing and roof structure;
 - (iv) Fire protection coverings to building elements required to comply with the Building Code of Australia; and
 - (v) Mechanical ventilation.
 - (b) The certificate/s shall demonstrate at what stage of construction inspections were undertaken.
-

APPENDIX 1

Leaseholder Key	Leaseholder & Property Name	Lot	DP
1	PM Withers (Woodlands)	5299	768214
		5303	768218
		5305	768220
		5285	768200
2	SA Withers (Woodlands)	4288	767036
3	DR & SM Curran (Mullingar)	1919	763897
4	GR Hill (Roo Roo)	1931	763909
		1930	763908
5	MA Withers (Manilla)	1926	763904
		1925	763908
6	G Cullinan (Carstairs)	1927	7639057
		5537	768447
		5538	768448
7	KD Ingram (Aston)	1924	763902
8	GJ & CD Cullinan (Trelega)	51	760425
9	FB, F & RG Smith (Mallara)	4735	767963
		2	757144
10	CV Wakefield (Minda)	5529	768439
11	LO Barnes (Lethero)	10	756937
12	Summergrove Pty Ltd	3	756937
13	EF & MM Healy (Court Nareen)	1923	763901
14	MW & MR Whyte (Willow Point)	1933	763911
15	KD Ingram (Aston)	452	761280
16	D & S Curran (Greenvale)	20	757147
		453	761281
17	Crown Land		
		58	760338
		5707	768607
		5708	768608
		8	756943