

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

I, the Minister for Planning, under Section 80(1) 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 reason for the imposition of Conditions are to:

- (i) minimise the adverse impact the development may cause through water and air pollution, noise, vegetation and visual disturbance; and
- (ii) provide for environmental monitoring, reporting and independent review.

Andrew Refshauge MP
Minister for Planning

Sydney

2002

File No. S01/02182

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]).
To:	The Minister for Planning ("the Minister"). (DA 345-11-01)
In respect of:	Lands described in Appendix "1".
For the following:	The development of the Broken Hill Mineral Separation Plant, and construction and operation of associated surface facilities ("the development").
Development Application:	DA No. 345-11-01 lodged with the Department of Planning on 26 November 2001, accompanied by an Environmental Impact Statement prepared by Resource Strategies Pty. Limited and dated November 2001.
BCA Classification:	• Class 5 (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), wet high intensity magnetic separator, filter house(s), silo(s), conveyor(s), storage bin(s), mill building(s), kiln building(s), tank(s))

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.

APPENDIX 1

Land Subject to Development Application for the Broken Hill Mineral Separation Plant

Site	Land Description
Mineral Separation Plant	Lot 6666 DP 822054
Water Supply Pipeline	Lot 161 DP 725335, Lot 55 DP 258288 & Resumed Land, Lot 70 DP 258288, Lot 1 DP 533250

And all Crown reserves and road reserves within the development application area.

SCHEDULE 2

DEVELOPMENT CONSENT CONDITIONS FOR THE BROKEN HILL MINERAL SEPERATION PLANT

The following acronyms and abbreviations are used in this section:

AEMR	Annual Environmental Management Report
Applicant, The	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]) (or its successors).
BHCC	Broken Hill City Council
CEMP	Construction Environmental Management Plan
Construction	Any activity requiring a Construction Certificate, the laying of a slab or significant excavation work relating to the MSP or associated infrastructure
dB(A)	Decibel (A-weighted scale)
Department, The	Department of Planning & Environment
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
LEMP	Landfill Environmental Management Plan
ML	Megalitre
MSP	Mineral Separation Plant
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
Operation	Any activity that results in the production, or intended production, of commercial quantities of mineral sands, including ilmenite, rutile or zircon
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Premises, the	Broken Hill Mineral Separation Plant site
Project, the	Broken Hill Mineral Separation Plant
RMS	NSW Roads and Maritime Services
Secretary	Secretary of the Department of Planning & Environment (or nominee)
SEE	Statement of Environmental Effects

Orange Type Represents February 2006 Modification
 Blue Type Represents July 2007 Modification
 Red Type Represents December 2008 Modification
 Green Type Represents October 2014 Modification

1. GENERAL

1.1 Adherence to terms of DA, EIS, SEE, EA etc.

- (a) The Broken Hill Mineral Separation Plant (the Project) shall be carried out generally in accordance with:
- (i) Development Application No. 345-11-01, lodged with the Department of Planning on 26 November 2001;
 - (ii) the proposal contained in the Environmental Impact Statement (EIS) prepared for the 'Broken Hill Mineral Separation Plant' and associated documents prepared for the Applicant by Resource Strategies Pty. Limited and dated November 2001;
 - (iii) all identified plans, safeguards and mitigation measures presented in the EIS;
 - (iv) all supplementary material including the reports titled:
 - "Responses to EPA Information Requests – Broken Hill MSP" in a letter dated 7 February 2002;
 - "Responses to NPWS Information Requests – Broken Hill MSP" in a letter dated 28 February 2002;
 - and "Responses to Planning NSW Hazard Information Requests – Broken Hill MSP" in a letter dated 3 April 2002; and
 - (v) the modification application MOD-130-8-2005i, lodged with the Department of Infrastructure and Planning on 25 August 2005 and accompanied by Statement of Environmental Effects August 2005 Modification for Broken Hill Mineral Separation Plant, prepared by Resource Strategies and dated August 2005;
 - (vi) the modification application MOD 13-2-2007 lodged with the Department on 14 February 2007 and accompanied by a Statement of Environmental Effects entitled *Broken Hill Mineral Separation Plant – February 2007 Modification*, prepared by Resource Strategies Pty Ltd and dated February 2007;
 - (vii) the *Broken Hill Mineral Separation Plant Responses to Submissions* lodged with the Department on 1 June 2007 and prepared by Resource Strategies Pty Ltd;
 - (viii) modification application DA 345-11-01 Mod 3, and supporting letter dated 12 September 2008 and prepared by Bemax Resources Ltd;
 - (ix) the modification application lodged with the Department on 11 November 2013 and accompanied by an Environmental Assessment entitled *Murray Darling Basin Operations Modification*, prepared by Resources Strategies Pty Ltd and dated November 2013;
 - (x) the Murray Darling Basin Operations Modification Response to Submissions lodged with the Department on 20 February 2014, prepared by Resource Strategies Pty Ltd and dated February 2014; and
 - (xi) the conditions of this consent granted by the Minister.
- (b) If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this consent shall prevail over all such documents to the extent of any consistency
- (c) Deleted
- (d) Deleted

1.2 Compliance

The applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:

- (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent;

- (b) any reports, review or audits commissioned by the Department regarding compliance with this consent; and
- (c) the implementation of any actions or measures contained in these documents.

1.3 **Obligation to Prevent and Minimise Harm to the Environment**

In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or decommissioning of the development.

1.4 **Deleted**

1.5 **Processing Operations**

- (a) Processing operations may take place on the premises until 31 December 2032.
- (b) The Applicant shall not process more than 1,200,000 tonnes of mineral concentrate/heavy mineral concentrate per year at the premises.

1.6 **Dispute Resolution**

- (d) The Applicant shall endeavour to resolve any dispute arising out of the implementation of these Conditions.
- (e) Should this not be possible in the case of a dispute between the Applicant and a public authority, company or person (but excluding any dispute between the Applicant and its contractors and/or subcontractors engaged in the construction or operation of the Project), in the first instance either party can refer the matter to the **Secretary** for resolution and, if not resolved, to the Minister. The Minister's determination of the disagreement shall be final and binding on all parties.

Note: Section 121 of the *Environmental Planning and Assessment Act 1979* provides mechanisms for resolution of disputes between the Department, the **Secretary**, councils and public authorities.

1.7 **Structural Adequacy**

The Applicant shall ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

2. **DELETED**

3. **ENVIRONMENTAL PERFORMANCE**

3.1 **Air Quality**

- (a) The following points referred to in the table are identified in this consent for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to air from the point.

EPA No.	Type of monitoring point	Type of discharge point	Description of location
1	Dust Monitoring		Dust Deposit gauge marked 'DBH3' in Figure 6 of Murray Darling Basin Operations Modification EA

1 EPA General Terms of Approval

2	Dust Monitoring		Dust Deposit gauge marked 'DBH1' in Figure 6 of Murray Darling Basin Operations Modification EA
3	Dust Monitoring		Dust Deposit gauge marked 'DBH2' in Figure 6 of Murray Darling Basin Operations Modification EA
4	Dust Monitoring		Dust Deposit gauge marked 'DBH4' in Figure 6 of Murray Darling Basin Operations Modification EA
5	Dust Monitoring		High Volume Air Sampler marked in Figure 6 of Murray Darling Basin Operations Modification EA
6	Air emissions monitoring	Discharge to air	Bag house stack serving leucoxene circuit identified as 'Leucoxene Hygiene Bag House Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
7	Air emissions monitoring	Discharge to air	Bag house stack serving ilmenite circuit identified as 'Ilmenite Hygiene Bag House Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
8	Air emissions monitoring	Discharge to air	Bag house stack serving rutile/zircon circuits identified as 'Rutile/Zircon Hygiene Bag House Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
9	Air emission monitoring	Discharge to air	Bag house stack serving LPG/LNG fired zircon dryer identified as 'Zircon Dryer Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
10	Air emission monitoring	Discharge to air	Bag house stack serving LPG/LNG fired leucoxene dryer identified as 'Leucoxene Dryer Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
11	Air emission monitoring	Discharge to air	Bag house stack serving LPG/LNG fired rutile dryer identified as 'Rutile Dryer Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
12	Air emission monitoring	Discharge to air	Bag house stack serving LPG/LNG fired ilmenite dryer identified as 'Ilmenite Dryer Stack' in Figure 3 of Murray Darling Basin Operations Modification EA
13	Air emission monitoring	Discharge to air	Scrubber stack serving brown coal fired roasting kiln identified as 'Ilmenite Kiln Stack' in Figure 3 of Murray Darling Basin Operations Modification EA

- (b) ²For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table. To avoid any doubt, this condition does not authorise the discharge or emission of any other pollutants other than those specified in the tables.

Points 6, 7 and 8

Pollutant	Units of Measure	100 percentile concentration Limit
Solid particulates	mg/m ³	100

Points 9, 10, 11, 12 and 13

Pollutant	Units of Measure	100 percentile concentration Limit
Solid particulates	mg/m ³	100
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both (as NO ₂)	g/m ³	0.35

Note: The reference conditions for limit concentrations in the above tables are: "dry, 273K, 101.3 Kpa, 3% O₂"

² EPA General Terms of Approval

3.2 Plant and Equipment – Design Parameters

- (a) ³The design parameters for the discharge points specified in the table below must meet the requirements specified in the table.

EPA Identification Number	Minimum Stack Height	Minimum Discharge Velocity (m/s)	Minimum Stack Diameter (m)
6	40.0	15	0.49
7	40.2	15	0.75
8	40.2	15	1.00
9	40.2	15	0.35
10	40.2	15	0.50
11	40.2	15	0.55
12	40.2	15	0.60
13	41.2	15	0.55

- (b) ⁴All stacks shall be designed in accordance with good engineering practice in order to minimise the effects of stack tip downwash and building wake effects on ground –level air pollutant concentrations.

Note:

Where necessary, the Applicant can apply to modify the stack design parameters included in Condition 3.2(a). The application must demonstrate that the modified design parameters comply with the Protection of the Environment Operations (Clean Air) Regulation 2010.

The following documents should be referred to for determining good engineering practice stack height:

USEPA, 1985, Guideline for Determination of Good Engineering Practice Stack Height (Technical support Document for the Stack Height Regulations), Revised EPA-450/4-80-023R. United States Environment Protection Agency, Washington DC, USA.

USEPA, 1995, User's Guide to the Building Profile Input Program, Revised February 1995, EPA-454/R-93-038. United States Environment Protection Agency, Washington DC, USA.

USEPA, 1997, Addendum to ISC3 User's Guide, The PRIME Plume Rise and Building Downwash Model. United States Environment Protection Agency, Washington DC, USA.

- (c) Deleted

3.3 Deleted

3.4 Alarms & Measures

- (a) ⁵The Applicant must prepare and submit to the EPA for review, prior to the operation of the relevant baghouse or scrubber:
- details of devices, measures or alarms to be used to warn operators that a malfunction has occurred in bag house point numbers, 6, 7, 8, 9, 10, 11 & 12 (refer to Condition 3.1(b)); and
 - details of devices, measures or alarms to be used to warn operators that the point number 13 (refer to Condition 3.1(b)) scrubber has malfunctioned.
- (b) ⁶Prior to the commencement of the development the Applicant must have confirmation in writing from the EPA that the details submitted in compliance with Subclause (a) is acceptable to the EPA.
- (c) ⁷The Applicant must install devices, measures or alarms that are acceptable to the EPA that will warn operators that a malfunction has occurred in pollution controls connected to discharge points 6, 7, 8, 9, 10, 11, 12 and 13 (refer to Condition 3.1(b)).

³ EPA General Terms of Approval

⁴ EPA General Terms of Approval

⁵ EPA General Terms of Approval

⁶ EPA General Terms of Approval

⁷ EPA General Terms of Approval

3. **Dust Suppression**

- (a) ⁸Activities occurring in or on the Premises must be carried out in a manner that will minimise the generation, or emissions from the premises, of wind-blown or traffic generated dust.
- (b) ⁹The Premises must be maintained in a condition, which minimises or prevents the emission of dust from the Premises.

3.6 **Noise Limits**

- (a) The Applicant must ensure that noise associated with the project does not exceed the noise limits at surrounding residential premises detailed in the Table below.

Location	Day/Evening/Night (excluding temperature inversions) dB(A) LAeq (15 minute)	Day/Evening/Night with temperature inversion dB(A) LAeq (15 minute)
R3 – Smith	35	39
All other residential premises	35	35

Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Attachment 2 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

3.6A **Noise Monitoring**

- (a) The Applicant shall prepare a Noise Monitoring Program for the project to the satisfaction of the Secretary. This program must be submitted to the Secretary by the end of March 2015, and must include a regular attended noise monitoring in accordance with Attachment 2.

3.6B **Noise Mitigation**

- (a) Upon receiving a written request for noise mitigation measures from the owner of the property shown as 'R3 – Smith' in Attachment 3, the Applicant must arrange the commencement of the physical implementation of noise mitigation measures at the property. The Applicant must provide an offer for the implementation of noise mitigation measures within 3 months of receiving the written request.

If the Applicant and the landowner cannot agree on measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

- (b) By the end of November 2014, the Applicant shall notify in writing the owner of property R3 that they have the right to request the Applicant for noise mitigation measures to be installed at their residence at any stage during the project.

Note: Noise mitigation measures include but are not limited to double glazing of windows, the installation of insulation in walls and ceilings and/or air conditioning.

3.6C **Operating Noise Conditions**

- (a) All external auxiliary equipment to the processing circuits (i.e. external fans, pumps and screening external to the tables) identified as noise generating must be acoustically treated with cladding or be enclosed.

⁸EPA General Terms of Approval

⁹EPA General Terms of Approval

- (b) The approved zircon, rutile and ilmenite kiln/roasted circuits must be constructed so as to be housed within a building.
- (c) Once mineral concentrate trains from the Atlas-Campaspe Mineral Sands Project are received at the MSP, any front end loader operating in the night time period must be fitted with a noise suppression kit.

3.6D Construction Noise

All construction work at or associated with the development must only be conducted between the following hours:

- (a) 7:00am to 6:00pm Monday to Friday, and
- (b) 8:00am to 1:00pm Saturdays.

3.7 Water Management

- (a) ¹⁰Except as may be expressly provided by a licence under the POEO Act 1997 in relation of the development, section 120 of the POEO Act must be complied with in and in connection with the carrying out of the development.
- (b) ¹¹The Applicant must lodge an application under Part 5 of the *Water Act 1912*, or if after the transitional period under the *Water Management Act 2000* for the construction of monitoring or other bores proposed in the EIS which will or may penetrate an aquifer.
- (c) ¹²Works for construction of bores must be completed within such period as specified by the **NOW**.
- (d) ¹³**NOW** must be notified if a supply of useable water is obtained and the bores shall then be suitably lined and capped to the standard required by **NOW**.
- (e) ¹⁴Within 2 months after the works are completed, **NOW** must be provided with an accurate plan of the location of the works and be notified of the results of any water analysis and other details as specified in the approval.
- (f) ¹⁵Officers of **NOW** or other authorised persons must be allowed full and free access to the works for the purpose of inspection and testing.
- (g) ¹⁶Construction and operation of the proposed water supply pipeline must be undertaken in accordance with the Commons Management Act 1989 such that construction of the pipeline must not commence in the Willyama Common until a Management Plan for that Common provides for the pipeline and has been adopted by the Minister for Land and Water Conservation. Alternatively a different route acceptable to the Regional Director, Far West Region of **NOW** may be agreed upon.

3.8 Discharges to Air and Water and Applications to Land

- (a) The following points referred to in the table are identified in this Consent for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.
- (b) ¹⁷The following utilisation areas referred to in the table below are identified in this Consent for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

¹⁰ EPA General Terms of Approval

¹¹ **NOW** General Terms of Approval

¹² **NOW** General Terms of Approval

¹³ **NOW** General Terms of Approval

¹⁴ **NOW** General Terms of Approval

¹⁵ **NOW** General Terms of Approval

¹⁶ **NOW** General Terms of Approval

¹⁷ EPA General Terms of Approval

Water and Land

EPA identification No.	Type of monitoring point	Type of discharge point	Description of location
15	Ground water quality monitoring		Groundwater monitoring to be identified by map provided by proponent with variation licence application

Volume and mass limits

(c) Deleted

(d) ¹⁸To avoid any doubt, this Condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.

3.9 Aboriginal Heritage Management

(a) The Applicant shall prior to the commencement of construction, prepare an Aboriginal Cultural Management Plan to address Aboriginal cultural issues associated with the construction and operation of the MSP. The Plan shall be prepared to the satisfaction of the Secretary and in consultation with OEH and the relevant stakeholders, including where practicable the Broken Hill Local Aboriginal Land Council and Bakandji Native Title Claimants.

The Plan shall include but not be limited to:

- i) identification of all sites of Aboriginal significance within the DA area, including sites to be disturbed by the proposed activity and sites outside the area of proposed disturbance;
- ii) management of parts of the project area where known Aboriginal sites are not expected to be directly impacted by the operation or activities associated with this development, including any impacts from earthworks, transport and associated infrastructure. This shall outline specific measures to avoid impacting on these identified sites, including all buffer areas and protective fences for protection of relics located adjacent to disturbance areas;
- iii) development of a salvage strategy for the sites at which salvage is proposed to be undertaken;
- iv) induction procedures and guidance to personnel about the management of archaeological sites and values within the DA area, both for known sites and sites that may be encountered during the course of Construction and/or Operations;
- v) general land management issues to protect cultural heritage values;
- vi) details of monitoring proposals to assess the effectiveness of the mitigation measures to ensure that relics are not being inadvertently impacted;
- vii) (details of ongoing consultation undertaken, where practical, with OEH, Broken Hill Local Aboriginal Land Council, Bakandji Native Title Claimants in the preparation of this Plan;
- viii) detail all statutory requirements to be met regarding the disturbance, destruction or removal of Aboriginal heritage under the *National Parks and Wildlife Act 1974*.

(b) Deleted

(c) The Aboriginal community is to be provided with the opportunity to collect artefacts from sites for which a Section 90 consent is to be obtained,

(d) If during the course of Construction or Operation, 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 OEH 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.

¹⁸ EPA General Terms of Approval

(e) Monitoring

The Applicant shall monitor the effectiveness of the measures outlined in the Aboriginal Cultural Management Plan [Condition 3.9(a)]. A summary of monitoring results shall be included in the AEMR.

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.

3.10 Hazards and Risk Reduction

- (a) The Applicant shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:
- i) all relevant Australian Standards;
 - ii) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - iii) the EPA's Environment Protection Manual Technical Bulletin *Bundling and Spill Management*.

In the event of an inconsistency between the requirements listed from i) to iii) above, the most stringent requirement shall prevail to the extent of the inconsistency.

3.11 Transport and Utilities

Road Works

(a) Deleted

- (b) ¹⁹All works to be undertaken on public roads as agreed between the Applicant and the Broken Hill City Council shall be at the expense of the Applicant. This includes:
- Road upgrades as described in the Environmental Impact Statement and agreed between the Applicant and the Broken Hill City Council;
 - Upgrade of intersections subject to increased traffic as identified in the Environmental Impact Statement and agreed between the Applicant and the Broken Hill City Council;
 - All necessary lighting and signage associated with subclauses (i)-(ii) above.
- (c) ²⁰The Applicant shall enter into an appropriate agreement with Broken Hill City Council regarding the construction of road upgrades and maintenance of the Pinnacles Road and Kanandah Road from the Mineral Sands Plant site to the Silver City Highway. Such an agreement will have regard to the type of haulage vehicles and relevant necessary upgrades and maintenance.
- (d) In addition to the above Conditions, the Applicant shall consult with the Western Region Development Committee regarding road upgrades and maintenance requirements.

Submission of Engineering Plans for Roadworks

- (e) Road and intersection designs are to be in accordance with the Roads and Maritime Service's "Road Design Guide" 1999 (or its latest version) and/or AUSTRROADS - Guide to Traffic Engineering Practice series and will have regard to the type of haulage vehicle employed for the Project.
- (f) Deleted

Road Construction and Maintenance

- (g) ²¹The Applicant shall enter into a Road Construction and Maintenance Agreement with Broken Hill City Council for the haulage route (along Pinnacles Road and Kanandah Road) from the Silver City Highway to the Mineral Separation Plant Site. The Agreement shall include a requirement for regular

¹⁹ BHCC General Terms of Approval

²⁰ BHCC General Terms of Approval

²¹ BHCC General Terms of Approval

joint inspections at an interval agreed with Broken Hill City Council as relevant, following completion of road upgrade works. These inspections are to determine and assess whether maintenance is required. Where such maintenance is required and not carried out within an agreed period from the time of inspection, the Broken Hill City Council will be entitled to carry out such maintenance work at the Applicant's cost. The Agreement will be reviewed annually by both the Applicant and Broken Hill City Council and varied as required as a result of the annual review. Provision should be made within the agreement to deal with matters subject to dispute between the relevant parties.

(g1) – (i) Deleted

3.12 Waste Management

(a) – (l) Deleted

Classification of controlled waste

- (m) The Applicant must accurately identify the waste, in accordance with Condition 6.4(c)(vii), and determine if the waste is a controlled waste within the meaning of the NEPM.

Note: The waste producer must check with the agency in the State or Territory of destination to determine whether waste is classified as a controlled waste under the NEPM. Unless advised otherwise by the agency of the State or Territory of destination, any waste included in Appendix 1 of this licence is a controlled waste for the purposes of the NEPM.

Application for a consignment authorisation

- (n) If the waste is transported from the Premises to another participating State or Territory, the Applicant must comply with all Conditions attached to the consignment authorisation issued by an agency or a facility delegated by an agency in the destination State or Territory.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 2005 to obtain, prior to the waste being dispatched, a consignment authorisation from an agency, or a facility delegated by an agency, in the destination State or territory to allow the movement of controlled waste.

Waste movements

- (o) ²²If the waste is transported from the Premises to another participating State or Territory, the Applicant must ensure that the waste is transported to a place that can lawfully be used as a waste facility for that waste.
- (p) ²³The Applicant must ensure that the waste transporter is licensed as required by the agency of each participating State or Territory through which the waste is transported.
- (q) ²⁴The Applicant must:
- retain a copy of the waste transport certificate for the waste for a period of not less than 4 years from the time the form was completed, and
 - make the copy of the waste transport certificate available for inspection by an authorised officer on request.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 2005 to complete a waste transport certificate for the waste. This should be done in accordance with the instructions printed on the certificate and the required copy of the waste transport certificate should be forwarded to the agency in the State of destination.

(r) Deleted

²² EPA General Terms of Approval

²³ EPA General Terms of Approval

²⁴ EPA General Terms of Approval

Waste Management

- (s) ²⁵The Applicant must not cause, permit or allow any waste generated outside the Premises to be received at the Premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the Premises to be disposed of at the Premises, except as expressly permitted by a licence under the POEO Act 1997.
- (t) ²⁶This 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 POEO Act 1997.
- (u) ²⁷Except as provided by any other Condition of this Consent, only the hazardous, industrial or group A waste listed below may be generated or stored at the Premises.

Note: Radioactive waste assessed as hazardous or industrial waste under Section 3.5 of the Wastes Guidelines.
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- (v) ²⁸The total tonnage of waste defined in Condition 3.12(u) of this Consent generated or stored at the premises must not exceed 300,000 tonnes per annum.

- (w) Deleted

3.13 Requirement To Submit a Report About Storage of Hazardous Waste

²⁹Within three months of a licence variation being issued by the EPA the proponent must submit a written report to the satisfaction of the EPA by a radiation consultant acceptable to the EPA. The report must include:

- (a) an assessment of storage of waste in open bunds fitted with sprays, where the waste contains radioactive substances and is classified under section 3.5 of the Waste Guidelines as hazardous;
- (b) a determination of whether this method of storage is consistent with “Code of Practice and Safety Guide for Radioactive Protection and Radioactive Waste Management in Mining and Mineral Processing (2005); and
- (c) where the method of storage is found to be inconsistent with the Code, provide a method of storage for the waste that is consistent with the Code.

3.14 Further Information Required for Coal Firing

- (a) ³⁰Prior to the installation of any coal fired equipment the proponent must have applied for and been granted a licence variation by the EPA to permit the use of the fuel.
- (b) ³¹An application for licence variation to install and discharge coal fired fuel must include a review of the July 2005 air quality report for the Mineral Separation Plant prepared by Pacific Air and Environment. The review must include the following:
 - i. demonstration of compliance with relevant air quality limits for solid particulates, type 1 and type 2 substances, nitrogen dioxide, sulphur dioxide and sulphuric acid mist in the *Protection of the Environment Operations (Clean Air) Regulation 2002*;
 - ii. identification of the sulphur content of the coal;

²⁵ EPA General Terms of Approval

²⁶ EPA General Terms of Approval

²⁷ EPA General Terms of Approval

²⁸ EPA General Terms of Approval

²⁹ EPA General Terms of Approval

³⁰ EPA General Terms of Approval

³¹ EPA General Terms of Approval

- iii. an assessment of the impact of nitrogen dioxide, sulphur dioxide and [articulates at the nearest sensitive receptors];
- iv. a detailed discussion of the methodology used to calculate expected emission rates of nitrogen oxides, sulphur dioxide and sulphuric acid mist from the stacks; and
- v. identification of changes required to air quality controls.

3.15 Deleted

3.16 Transport of Hazardous Materials

- (a) Material to be transported shall be classified and transported in accordance with the *NSW Radiation Control Regulation 2003* and the Code of Practice for the Safe Transport of Radioactive Material published by the *Australian Radiation Protection and Nuclear Safety Agency, 2001*; and
- (b) Process waste is to be transported by heavy vehicles otherwise transporting mineral and heavy mineral concentrates, as backloads on return trips, wherever practicable.

4. ENVIRONMENTAL MONITORING AND AUDITING

4.1 Independent Environmental Audits

- (a) Within 2 years of the latest modification (DA 341-11-01 Mod 3) and every 3 years thereafter, or at periods otherwise agreed to by the Secretary, and until such time as agreed to by the Secretary, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:
 - be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - include consultation with the relevant agencies;
 - assess the environmental performance of the development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL/s (including any assessment, plan or program required under these approvals);
 - review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
 - recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.
- (b) Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit to the Secretary, together with its response to any recommendations contained in the audit report.

4.2 Deleted

4.3 Water Monitoring

- (a) Groundwater quality monitoring shall be undertaken in accordance with a monitoring program which includes parameters and frequency agreed in consultation with EPA and NOW. The results of this monitoring shall be reported in the Annual Environmental Management Report. Should monitoring of groundwater quality indicate that the MSP has had, or is having, an adverse effect on groundwater quality a contingency plan shall be formulated in consultation with EPA and NOW and implemented.

4.4 Air Quality Monitoring

- (a) Monitoring sites shall be selected to monitor dust deposition rates and total suspended particulate (TSP) matter at nearby sensitive receptors, in accordance with Australian Standard AS2922-1987 Ambient Air – Guide for Siting of Sampling Units.

- (b) Dust deposition monitoring and analysis shall be conducted according to Australian Standard AS3580.10.1-1991 Particulates – Deposited Matter – Gravimetric Method.
- (c) Suspended particulate – PM₁₀ monitoring and analysis shall be conducted according to *Australian Standard AS/NZS 3580.9.6:2003 Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM₁₀ high volume sampler with size selective inlet – Gravimetric method*. The results of this monitoring shall be reported in the Annual Environmental Management Report.

4.5 Waste Monitoring

- (a) ³²Conditions 3.12 and 7.3 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in Condition 3.12(u), within NSW.
- (b) ³³Conditions 3.12 and 7.4 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in Condition 3.12(u), into and out of NSW.

4.6 Monitoring and Recording Conditions

- (a) ³⁴The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the POEO 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 Subclauses (b) and (c).
- (b) ³⁵All records required to be kept by the EPA licence must be:
- in a legible form, or in a form that can readily be reduced to a legible form;
 - kept for at least 4 years after the monitoring or event to which they relate took place; and
 - produced in a legible form to any authorised officer of the EPA who asks to see them.
- (c) ³⁶The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;
- the time(s) at which the sample was collected;
 - the point at which the sample was taken; and
 - the name of the person who collected the sample.
- (d) ³⁷For 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. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

Water and Land

Point 15

Pollutant	Units of measure	Frequency	Sampling Method
standing water level	metres	quarterly	inspection
pH	pH	quarterly	representative sample
conductivity	us/cm	quarterly	representative sample

Air

Points 1, 2, 3 & 4

Pollutant	Units of measure	Frequency	Sampling Method
particulates – deposited matter	g/m ² /month	monthly	Australian Standard 3580.10.1-1991

³² EPA General Terms of Approval

³³ EPA General Terms of Approval

³⁴ EPA General Terms of Approval

³⁵ EPA General Terms of Approval

³⁶ EPA General Terms of Approval

³⁷ EPA General Terms of Approval

Point 5

Pollutant	Units of measure	Frequency	Sampling Method
Suspended particulate matter PM ₁₀	µg/m ³	every 6 days*	Australian Standard 3580.9.6-2003

* This requirement to be reviewed after 1 year's operation

Points 6, 7 & 8

Pollutant	Units of measure	Frequency	Sampling Method
Solid particulates	mg/m ³	Annual	TM-15
Velocity	m/s	Annual	TM-2
Volumetric flow rate	m ³ /s	Annual	TM-2
Temperature	°C	Annual	TM-2
Moisture content in stack	%	Annual	TM-22
Dry gas density	Kg/m ³	Annual	TM-23
Molecular weight of stack gases	g/gmole	Annual	TM-23
Type 1 and Type 2 substances in aggregate	mg/m ³	Special frequency 1*	TM-12 & 13

* In the above table Special frequency 1 means one sample to be collected within the first year of the discharge point being in operation.

Points 9, 10, 11, 12 & 13

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen dioxide (NO ₂) or nitric oxide (NO) or both (as NO ₂)	g/m ³	Annual	TM-11
Solid particulates	mg/m ³	Annual	TM-15
Velocity	m/s	Annual	TM-2
Volumetric flow rate	m ³ /s	Annual	TM-2
Temperature	°C	Annual	TM-2
Moisture content in stack	%	Annual	TM-22
Dry gas density	Kg/m ³	Annual	TM-23
Molecular weight of stack gases	g/gmole	Annual	TM-23
Carbon dioxide in stack gases	%	Annual	TM-24
Oxygen in stack gases	%	Annual	TM-25
Type 1 and Type 2 substances in aggregate	mg/m ³	Special frequency 1*	TM-12 & 13

* In the above table Special frequency 1 means one sample to be collected within the first year of the discharge point being in operation

Testing methods – concentration limits

(e) ³⁸Monitoring for the concentration of a pollutant emitted to the air required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with:

- any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or
- if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or
- if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

³⁸ EPA General Terms of Approval

Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".)

- (f) ³⁹Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area required by Condition 4.6(d) above must be done in accordance with:
- the Approved Methods Publication; or
 - if there is no methodology required by the Approved Methods Publication or by the general terms of approval 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, unless otherwise expressly provided in the licence.

4.7 Requirement to monitor radiation

The Applicant must monitor radiation levels in accordance with the requirements set out in the Environmental Protection Licence issued by the DECC. The Applicant must ensure that blended waste to be disposed of outside the premises is analysed to ensure characterisation in accordance with DECC waste disposal guidelines and is disposed of at a place licensed by the DECC to lawfully accept that class of waste.

5. DELETED

5.1 Deleted

5.2 Deleted

5.3 Deleted

6. ENVIRONMENTAL MANAGEMENT

6.1 Deleted

6.2 Environmental Management Strategy

The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:

- (a) be submitted to the Secretary for approval by the end of March 2015;
- (b) provide the strategic framework for environmental management of the development;
- (c) identify the statutory approvals that may apply to the development;
- (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
- (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance;
 - respond to emergencies; and
- (f) include:
 - copies of any strategies, plans or programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.

³⁹ EPA General Terms of Approval

6.3 **Construction Environmental Management Plan (CEMP)**

- (a) The Applicant shall prepare and implement a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during the construction of the MSP. The Plan shall include, but not necessarily limited to:
- a description of all activities to be undertaken on the site during construction of MSP, including an indication of stages of construction, where relevant;
 - statutory and other obligations that the Applicant is required to fulfil during construction, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - specific consideration of measures to address any requirements of the Department, the EPA, NOW and BHCC during construction;
 - details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
 - a description of the roles and responsibilities for all relevant employees involved in the construction of the MSP;
 - the Management Plans listed under Condition 6.3(c) of this Consent; and,
 - arrangements for community consultation and complaints handling procedures during construction.
- (b) The CEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of construction of the MSP, or within such period otherwise agreed by the Secretary. Construction shall not commence until written approval has been received from the Secretary. Upon receipt of the Secretary's approval, the Applicant shall supply a copy of the CEMP to BHCC, the EPA and NOW as soon as practicable.
- (c) As part of the CEMP for the MSP, required under Condition 6.3(a) of this Consent, the Applicant shall prepare and implement the following Management Plans:
- (i) a **Fire Safety Study** for the MSP, covering all aspects detailed in the Department's publication 'Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The Study shall include a strict maintenance schedule for essential services and other safety measures. The Study shall be submitted for the approval of the Commissioner of the NSW Fire Brigades prior to inclusion in the CEMP;
- (ii) a **Hazard and Operability Study** of the MSP chaired by an independent, qualified person or team. The independent person or team shall be approved by the Secretary. The Study shall be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 8 – HAZOP Guidelines*;
- the **Hazard and Operability Study** required by condition 6.3 (c) (ii) shall be updated to include and reflect the works and activities described in the modification application MOD-130-8-2005i lodged with the Department of Infrastructure and Planning on 25 August 2005 and accompanied by Statement of Environmental Effects August 2005 Modification for Broken Hill Mineral Separation Plant, prepared by Resource Strategies. In particular the updated HAZOP study should address interfaces between the original design and the proposed changes for both hardware and software and should include an implementation program for the HAZOP recommendations. The updated HAZOP Study shall be submitted to the Secretary for approval prior to commencement of construction of works or commencement of operations described in the modification application (130-8-2005i). Operation shall not commence until the safety related recommendations have been implemented or alternate measures put in place to the satisfaction of the Secretary.

Note: Condition 6.3(c) of this Consent does not necessary require the HAZOP chair to be independent of the Applicant. Rather, it requires the HAZOP chair to be independent of the design process for the MSP the subject of this Consent.

- (iii) a **Construction Safety Study** for the MSP, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 – Construction Safety Study Guidelines*;
- (iv) **construction noise management protocol** which shall include but not be limited to compliance standards, community consultation, complaints handling monitoring/system, site contact person to follow up complaints, mitigation measures, the design/orientation of the proposed mitigation methods demonstrating best practice, construction times, contingency measures where noise complaints are received and monitoring methods and program; and
- (v) an **Erosion and Sedimentation Management Plan** to detail measures to minimise erosion during construction of the MSP. The Plan shall address the requirements of the EPA, NOW and BHCC, should there be any. The Plan shall include, but not necessarily be limited to:
 - results of investigations into soils associated with the site, in particular the stability of the soil and its susceptibility to erosion;
 - details of erosion, sediment and pollution control measures and practices to be implemented during construction of the MSP;
 - demonstration that erosion and sediment control measures will conform with, or exceed, the relevant requirements and guidelines provided in NOW's publication *Urban Erosion and Sedimentation Handbook*, the EPA's publication *Pollution Control Manual for Urban Stormwater* and the Department of Housing's publication *Soil and Water Management for Urban Development*;
 - design specifications for diversionary works, banks and sediment basins;
 - an erosion monitoring program during construction of the MSP; and
 - measures to address erosion, should it occur, and to rehabilitate/ stabilise disturbed areas of the site.

6.4 Operation Environmental Management Plan (OEMP)

- (a) The Applicant shall prepare and implement an Operation Environmental Management Plan (OEMP) to detail an environmental management framework, practices and procedures to be followed during the operation of the MSP. This OEMP shall contain, but not be limited to, the following:
 - identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the MSP, including all consents, licences, approvals and consultations;
 - a description of the roles and responsibilities for all relevant employees involved in the operation of the MSP;
 - overall environmental policies and principles to be applied to the operation of the MSP;
 - standards and performance measures to be applied to the MSP, and a means by which environmental performance can be periodically reviewed and improved;
 - management policies to ensure that environmental performance goals are met and to comply with the Conditions of this Consent;
 - the Management Plans listed under Condition 6.4(c) of this Consent;
 - the landscaping and rehabilitation proposals for the site (to be developed in consultation with BHCC and OEH); and
 - the environmental monitoring requirements outlined under the Conditions of this Consent.
- (b) The OEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of operation of the MSP, or within such period otherwise agreed by the Secretary. Operation shall not commence until written approval has been received from the Secretary. Upon receipt of the Secretary's approval, the Applicant shall supply a copy of the OEMP to BHCC, the EPA, as soon as practicable.

- (c) As part of the OEMP for MSP, required under Condition 6.4(a) of this Consent, the Applicant shall prepare and implement the following Management Plans:
- (i) an **Air Quality Management Plan** to outline measures to minimise impacts from the MSP on local and regional air quality. The Plan shall address the requirements of the EPA and BHCC, should there be any. The Plan shall include, but not necessarily be limited to:
- identification of all major sources of particulate and gaseous air pollutants that may be emitted from the MSP, being both point-source and diffuse emissions, including identification of the major components and quantities of these emissions;
 - monitoring for gaseous and particulate emissions from the MSP, in accordance with any requirements of the EPA;
 - procedures for the minimisation of gaseous and particulate emissions from the MSP, and the reduction of these emissions over time, where appropriate;
 - protocols for regular maintenance of process equipment to minimise the potential for leaks and fugitive emissions;
 - a contingency plan should an incident, process upset or other initiating factor lead to elevated air quality impacts, whether above normal operating conditions or environmental performance goals/ limits; and
- (ii) an **Energy Management Plan**. The Plan shall include, but not necessarily be limited to:
- design features of all equipment and buildings to reduce energy consumption (for heating, cooling and lighting etc);
 - procedures and methods for monitoring energy consumption by the development;
 - protocols for monitoring the efficiency of pumps and all other electrically-driven process equipment, including procedures for maintenance of these items;
 - consideration of the insulation requirements of all pipes and vessels containing process fluids other than at ambient temperature, and procedures for the maintenance of such insulation material; and
 - mechanisms to consider and address greenhouse gas emissions from the MSP.
- (iii) a **Water Management Plan** to outline measures to control and manage surface water (including erosion and sedimentation), stormwater and process water associated with the MSP. The Plan shall address the requirements of the EPA and Council, should there be any. The Plan shall include, but not necessarily be limited to:

Surface water, erosion and sedimentation management

- measures to be implemented to minimise the potential for erosion from the site, and adjacent slopes associated with the site, during the operation of the MSP and measures to maintain all erosion mitigating works;
- demonstration that erosion and sedimentation control measures will conform with, or exceed, the relevant requirements and guidelines provided in NOW's publication *Urban Erosion and Sedimentation Handbook*, the EPA's publication *Pollution Control Manual for Urban Stormwater* and the Department of Housing's publication *Soil and Water Management for Urban Development*; and
- measures to rehabilitate erosion-affected areas and areas the subject of excavation, including tree, shrub and/ or cover crop species and implementation.

Stormwater management

- demonstration that all relevant stormwater control infrastructure is capable of handling a one-in-ten year, one hour storm event and minimising stormwater peak flows and peak pollutant concentrations;
- procedures for planting and maintaining vegetation along all stormwater channels and detention systems, to minimise the potential for erosion;

- procedures for the installation and maintenance of gross pollutant traps to screen run-off from the site; and
- a demonstration of consistency with the stormwater management plan for the catchment, should one exist, or with the EPA's publication *Managing Urban Stormwater: Council Handbook* should a stormwater management plan for the catchment not exist.

Process water management

- details of how site water consumption will be minimised through water reuse and recycling;
- details of all process water treatment systems for the MSP, including procedures for maintenance of the systems and water quality monitoring regimes, where relevant; and
- a program to monitor consumption of water at the site

- (iv) ⁴⁰ an **Emergency Response Plan** for the MSP. The Plan shall be prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines* and shall document the procedures to deal with all types of incidents (eg spill, explosions or fire) that may occur at the premises or outside the premises (eg during transfer) which are likely to cause harm to the environment.
- the **Emergency Response Plan** required by condition 6.4 (c) (iv) shall be updated to include and reflect the works and activities described in the modification application MOD-130-8-2005i lodged with the Department of Infrastructure and Planning on 25 August 2005 and accompanied by Statement of Environmental Effects August 2005 Modification for Broken Hill Mineral Separation Plant, prepared by Resource Strategies. In addition, the Emergency Response Plan shall include the classification of the applicable materials handled in accordance with the *Code of Practice for the Safe Transport of Radioactive Materials, 2001* and demonstrate that emergency measures/procedures are in place as recommended in the *Code of Practice for the Safe Transport of Radioactive Materials, 2001*. The updated Emergency Response Plan shall be submitted to the Secretary for approval prior to commencement of construction of works or commencement of operations described in the modification application (130-8-2005i).
- (v) a **Safety Management System**, covering all operations at the MSP and associated transport activities involving hazardous materials. The System shall clearly specify all safety-related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to safety procedures. The System shall be developed in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 9 – Safety Management*.
- the **Safety Management System** required by condition 6.3 (c) (v) shall be updated to include and reflect the works and activities described in the modification application MOD-130-8-2005i lodged with the Department of Infrastructure and Planning on 25 August 2005 and accompanied by Statement of Environmental Effects August 2005 Modification for Broken Hill Mineral Separation Plant, prepared by Resource Strategies. The updated Safety Management System shall be submitted to the Secretary for approval prior to commencement of construction of works or commencement of operations described in the modification application (130-8-2005i).
- (vi) a **Transport Code of Conduct** to outline management of traffic impacts associated with the MSP and minimum requirements for the movement of heavy vehicles to and from the site. The Code shall meet the requirements of BHCC and the RMS, should there be any. The Code shall include, but not necessarily be limited to:
- restrictions to routes (consistent with the Transport of Hazardous Materials Study required above, where relevant);
 - restrictions to the hours of transport operations to avoid travelling through built-up areas late at night or at times of high traffic flows in those areas;
 - speed limits to be observed along routes to and from the site, in particular through built-up areas;

⁴⁰ EPA General Terms of Approval

- minimum requirements for vehicle maintenance to address noise and exhaust emissions;
- load coverage requirements; and
- behaviour requirements for vehicle drivers.
- the **Transport Code of Conduct** required by condition 6.3 (c) (vi) shall be updated to include and reflect the works and activities described in the modification application MOD-130-8-2005i lodged with the Department of Infrastructure and Planning on 25 August 2005 and accompanied by Statement of Environmental Effects August 2005 Modification for Broken Hill Mineral Separation Plant, prepared by Resource Strategies. The Transport Code of Conduct should also reflect the requirements of the updated Waste Management Plan, Emergency Response Plan, Safety Management System and Transport of Hazardous Material Plan. The updated Transport Code of Conduct shall be submitted to the **Secretary** for approval prior to commencement of construction of works or commencement of operations described in the modification application (130-8-2005i).

(vii) a **Noise Management Plan**, which is to outline how noise is to be managed to meet the requirements of this Consent.

(viii) a **Waste Management Plan** to outline measures to minimise the production and impact of waste produced at the MSP during commissioning and operation, through the implementation of waste reduction, reuse and recycling principles. The Plan shall meet the requirements of the **EPA** and Council, should there be any. The Plan shall include, but not necessarily be limited to:

- identification of the types and quantities of waste materials produced on the site during commissioning and operation of the MSP;
- programs aimed at minimising the production of waste at the site through the implementation of operational and management measures;
- details of potential reuse and recycling avenues for waste materials produced on the site, including collection and handling procedures;
- details of appropriate disposal routes in the event that reuse and recycling avenues are not available or are not practicable;
- programs for involving and encouraging employees and contractors to minimise domestic waste production on the site and reuse/ recycle where appropriate.
- ⁴¹procedures to ensure that any liquid and/or non liquid waste generated and/or stored at the Premises is assessed and classified in accordance with the *EPA Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*, in force as at 1 July 1999.
- ⁴²procedures and a monitoring program to ensure that all wastes generated, stored or land filled at the premises, or transported from the premises for disposal, are correctly classified under the Waste Guidelines for purposes permitted by this licence or, in the case where the waste is transported from the premises, that the waste entered on the associated waste data form is correctly classified under the Waste Guidelines.
- ⁴³Procedures and a monitoring program to ensure that the requirements of *The Code of Practice and Safety Guide for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing, 2005* are complied with; and
- Procedures and a monitoring program to ensure that the requirements of the *Code of Practice for the Safe Transport of Radioactive Materials, 1990 - revised 2001 (Commonwealth of Australia)* and the *NSW Road and Rail Transport (Dangerous Goods) Act 1997* are complied with.

⁴¹ **EPA** General Terms of Approval

⁴² **EPA** General Terms of Approval

⁴³ **EPA** General Terms of Approval

⁴⁴Prior to the commencement of the development the Applicant must have confirmation in writing from the EPA that the **Waste Management Plan**, submitted in compliance with Condition 6.4 is acceptable to the EPA. ⁴⁵The Applicant must implement a **Waste Management Plan** that is acceptable to the EPA.

- 6.5 The Applicant shall review and update the Environmental Management System and relevant management plans referred to in conditions 6.3, 6.4, and 6.7 to appropriately reflect the modification referred to in condition 1.1(a)(vi) by 29 February 2008, to the satisfaction of the Secretary.

6.6 Tenure

- (a) ⁴⁶Construction and operation of the MSP must be undertaken in accordance with the provisions of the Western Lands Act 1901 such that the MSP works and operations undertaken on the site are consistent with the relevant Western Lands Lease purpose. This provision assumes tenure of the site remains a Western Lands Lease. Should the tenure be converted to freehold, use of the site should be in accordance with relevant agreement between the freehold landholder and the Applicant.

6.7 Transport of Hazardous Materials

The Applicant must prepare and submit to the Secretary for approval prior to the transport of hazardous materials a **Transport of Hazardous Materials Plan**, outlining arrangements for the safe transport of hazardous materials along the entire length of the Mineral Concentrate Transport route and demonstrating that the transport of material will be in accordance with the *Code of Practice for the Safe Transport of Radioactive Material* published by the Australian Radiation Protection And Nuclear Safety Agency and the relevant NSW and Commonwealth regulations. It is recommended that the Hazardous Materials and Radiation section of the Department of Environment and Conservation be consulted prior to preparation of the plan. The transport of hazardous materials shall not commence until the Transport of Hazardous Materials Plan is approved by the Secretary.

Note: Where a **Transport of Hazardous Materials Plan** is required by and prepared in accordance with the modified Ginkgo Mine conditions of consent (251-09-01), and the **Transport of Hazardous Materials Plan** is approved by the Secretary, that Plan may be deemed to satisfy the requirements of this condition with the approval of the Secretary.

6.8 Revision of Strategies, Plans and Programs

Within 3 months of the submission of:

- (a) an AMER under condition 7.1 below;
- (b) any incident report;
- (c) an audit under condition 4.1; or
- (d) any modification to the conditions of this consent (unless the conditions require otherwise);

the Applicant shall review and, if necessary, revise the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review, the revised document must be submitted to the Secretary for approval.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.

⁴⁴ EPA General Terms of Approval

⁴⁵ EPA General Terms of Approval

⁴⁶ EPA General Terms of Approval

7. ENVIRONMENTAL REPORTING

7.1 *Annual Environmental Management Report*

- (a) In order to facilitate the integration of the environmental management of the subject land and site, the Applicant shall submit to the **Secretary**, for approval, an Annual Environmental Management Report (AEMR) for the site. The AEMR shall be subject to review by all relevant government agencies and BHCC.

The AEMR shall review the performance of the mine against the Environmental Management Strategy and the relevant Operational Management Plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report shall include, but not be limited to, the following matters:

- (i) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals;
 - (ii) a review of the effectiveness of the environmental management of the MSP in terms of relevant agency requirements;
 - (iii) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person; and
 - (iv) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.
- (b) In preparing the AEMR, the Applicant shall:
- (i) consult with the **Secretary** during preparation of each report for any additional requirements;
 - (ii) comply with any requirements of the **Secretary** 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 **Secretary**.

7.2 Deleted

7.3 Deleted

7.4 Deleted

7.5 Deleted

Attachment Number 1 – Mandatory Conditions for all EPA licences

Administrative conditions

Other activities

1. This licence applies to all other activities carried on at the premises, including:
 - Waste activities – Hazardous, industrial or Group A waste generation or storage, and
 - Waste facilities – Solid waste landfill site

Operating conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

1. This includes:
 - a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
 - b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Maintenance of plant and equipment

2. All plant and equipment installed at the premises or used in connection with the licensed activity:
 - a) must be maintained in a proper and efficient condition; and
 - b) must be operated in a proper and efficient manner.

Monitoring and recording conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

1. The record must include details of the following:
 - a) the date and time of the complaint;
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - f) if no action was taken by the licensee, the reasons why no action was taken.
2. The record of a complaint must be kept for at least 4 years after the complaint was made.
3. The record must be produced to any authorised officer of the EPA who asks to see them.

Telephone complaints line

4. The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
5. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
6. This condition does not apply until 3 months after this condition takes effect.

Reporting conditions

Annual Return documents

What documents must an Annual Return contain?

1. The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
 - a) a Statement of Compliance; and
 - b) a Monitoring and Complaints Summary.
2. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence.
3. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

1. An Annual Return must be prepared in respect of each reporting, except as provided below

Note: The term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

2. Where this licence is transferred from the licensee to a new licensee,
 - a) the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
 - b) the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

3. Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on
 - a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - b) in relation to the revocation of the licence – the date from which notice revoking the licence operates.

Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the ‘due date’).

Notification where actual load can not be calculated

(Licences with assessable pollutants)

Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date.

The notification must specify:

- c) the assessable pollutants for which the actual load could not be calculated; and
- d) the relevant circumstances that were beyond the control of the licensee.

Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- (a) the licence holder; or
- (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- e) the cause, time and duration of the event;
- f) the type, volume and concentration of every pollutant discharged as a result of the event;
- g) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- h) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- i) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- j) (details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- k) (any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

Copy of licence kept at the premises or on the vehicle or mobile plant

1. A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.
2. The licence must be produced to any authorised officer of the EPA who asks to see it.
3. The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

Attachment Number 2 – Noise Compliance Assessment

Applicable Meteorological Conditions

1. The noise criteria in condition 3.6 are to apply under all meteorological conditions except the following:
 - (a) average wind speed at microphone height exceeds 5 m/s;
 - (b) wind speeds greater than 3 m/s measured at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be recorded by the closest meteorological station.

Compliance Monitoring

3. Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

Attachment Number 3 – Receiver Locations

