



WESTERN AUSTRALIA  
MINISTER FOR ENVIRONMENT

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED  
(PURSUANT TO THE PROVISIONS OF THE  
ENVIRONMENTAL PROTECTION ACT 1986)

ENEABBA WEST MINERAL SANDS PROJECT

This proposal may be implemented subject to the following conditions:

1. The proponent shall adhere to the proposal as assessed by the Environmental Protection Authority and shall fulfil the commitments made in the Public Environmental Report and those published in Appendix 2 of Environmental Protection Authority Bulletin 403 (copy attached).
2. The proponent shall carry out the mining and processing operation in accordance with the provisions for the protection and management of the environment contained in the Mineral Sands (Eneabba) Agreement Act 1975-1988.
3. Prior to the commencement of both construction and mining, the proponent shall prepare and implement dieback hygiene programmes in consultation with the Department of Conservation and Land Management, to the satisfaction of the Minister for Environment on the advice of the Environmental Protection Authority. The approved programmes shall be available for public information.
4. The proponent shall take all reasonable measures to ensure that no detrimental effects on vegetation, groundwater levels or groundwater quality, which result from the mining operation and which are unacceptable to the Environmental Protection Authority, occur within the adjacent Reserves for the Conservation of Flora and Fauna. Prior to the

Published on

11 OCT 1989

commencement of productive mining, the proponent shall prepare and implement a programme to monitor vegetation, groundwater levels and groundwater quality in these Reserves, in consultation with the Department of Conservation and Land Management, to the satisfaction of the Environmental Protection Authority.

The proponent shall immediately report any adverse effects identified by this monitoring programme to the Environmental Protection Authority and shall draw up and implement a plan for remedial action, to the satisfaction of the Environmental Protection Authority, as soon as possible thereafter.

To ensure adequate protection of groundwater quality and control of pollution, the proponent shall obtain a Works Approval (prior to construction) and a Licence (prior to productive mining) under the provisions of Part V of the Environmental Protection Act 1986.

5. The proponent shall be responsible for decommissioning the plant and rehabilitating the site and its environs in accordance with the proposals submitted under the provisions of Clause 7 and the requirements of Clause 8 of the Mineral Sands (Eneabba) Agreement Act, and shall give at least six months' notice to the Minister responsible for the administration of the Agreement Act prior to decommissioning. The proponent shall also notify the Environmental Protection Authority of its intention at the same time. The Environmental Protection Authority shall advise the Minister for Environment who shall consult with the Minister responsible for the administration of the Agreement Act regarding the environmental acceptability of the proposals which shall include a final rehabilitation plan.

Additionally, the proponent shall continuously rehabilitate the productive agricultural land that is to be mined, to an environmentally stable condition according to a rehabilitation plan developed in consultation with the Department of Agriculture, to the satisfaction of the Minister for Environment on the advice of the Environmental Protection Authority.

In its rehabilitation operations, the proponent shall not decrease the proportion of land currently supporting native vegetation unless the Commissioner of Soil Conservation, acting under the Soil and Land Conservation Act, is satisfied that land degradation will not result from any proposed change in land use.

6. The proponent shall refer to the Environmental Protection Authority for assessment any proposal to modify the mining and processing operation which, if implemented, would be likely to have a significant effect upon the environment.
7. Prior to any transfer of ownership of the proposal or other action which would give rise to a need to change the nominated proponent, the proponent shall advise the Minister for Environment so that a new proponent, who shall assume responsibility for the conditions contained in this statement, can be nominated. Any such advice shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

Bob Pearce, MLA  
MINISTER FOR ENVIRONMENT

11 OCT 1989

## ENEABBA WEST PROJECT

### ENVIRONMENTAL MANAGEMENT COMMITMENTS

In addition to the Environmental Protection Act (1986), the Company has obligations under the Mineral Sands (Eneabba) Agreement Act (1975-1988) for environmental management, including:

- (i) submission of detailed proposals for approval by the Minister,
- (ii) conduct of a continuous programme of investigations and research including monitoring, and
- (iii) submission of Triennial Reports for approval by the Minister, together with interim reports of progress.

Through these processes, the Company will be submitting specific plans for mining and environmental management for Ministerial approval on an ongoing basis.

The Company is committed to achieving a high standard of environmental management and rehabilitation. Towards this end, the Company is committed to the following:

1. construction of access to and from the Brand Highway to MRD and Shire standards with special regards to road safety.
2. application of a comprehensive occupational health and safety policy and systems to achieve more stringent standards than those set by legislation.
3. pre-operational monitoring of radiation on the minesite and reporting of results to the Department of Mines as required under the Code of Practice on Radiation Protection in the Mining and Milling of Radioactive ores (1987).
4. extension of OHS monitoring, where relevant, to new mining and processing facilities constructed under this proposal including:
  - 4.1 personal and environmental air sampling in accordance with requirements of Regulations under the Mines Regulation Act;
  - 4.2 monitoring for noise under the yet-to-be proclaimed amendments to the Mines Regulation Act and Regulations;
  - 4.3 monitoring for radiation in compliance with the Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores (1987);
  - 4.4 monitoring and reporting of lost time accidents under the Department of Mines "Axtat" system.
5. monitoring the hydrology of the Erindoon Creek catchment including:
  - 5.1 groundwater levels and electrical conductivity in suitable farm bores within a five kilometre radius of the minesite, as well as in the dredge pond, production bores and two lines of piezometers;
  - 5.2 analysis of major ions in water samples from Lake Erindoon on a quarterly basis;
  - 5.3 monitoring of surface soil salinity along two transects through saline land, on a quarterly basis.
6. investigation of the use of deep rooted species such as native species, lupins, lucerne, tagasaste and tree belts to lower groundwater levels by increasing evapotranspiration.
7. development of suitable rehabilitation strategies in consultation with the landowners and the Department of Agriculture following the appropriate investigations, and submission of these strategies for approval under the Agreement Act.

8. monitoring the effect of water table drawdown on standing native vegetation along three drill lines to determine the need to develop strategies to minimise drawdown effects.
9. monitoring the establishment and development of rehabilitated native vegetation using the existing electronic botanical data management system.
10. minimising the area open to operations and reporting details of areas disturbed, areas rehabilitated and area open through the reporting procedures of the Agreement Act.
11. review and upgrading of dieback prevention policy for the Eneabba operations.

Conti  
CL 4(2)  
6/88

- (3) If the decision of the Minister is as mentioned in either of paragraphs (b) or (c) of subclause (1) of this Clause the Minister shall afford the Company full opportunity to consult with him and should it so desire to submit new or revised proposals either generally or in respect to some particular matter.
- (4) If the decision of the Minister is as mentioned in either of paragraphs (b) or (c) of subclause (1) of this Clause and the Company considers that the decision is unreasonable the Company within two months after receipt of the notice mentioned in subclause (2) may elect to refer to arbitration in the manner hereinafter provided the question of the reasonableness of the decision PROVIDED THAT any requirement of the Minister pursuant to the proviso to subclause (1) of this Clause shall not be referable to arbitration hereunder.
- (5) Subject to and in accordance with the EP Act and any approvals and licences required under that Act the Company shall implement proposals approved or determined pursuant to this Clause in accordance with the terms thereof.

7. If the Company at any time during the continuance of this Agreement desires to significantly modify expand or otherwise vary its activities beyond those specified in the approved project any approved proposals or desires to mine minerals granted by the Mining Lease which are not the subject of any approved proposals it shall give notice of such desire to the Minister and within 2 months thereafter shall submit to the Minister detailed proposals in respect of all matters covered by such notice and such other matters as the Minister may require.

The provisions of subclauses (4), (5) and (6) of Clause 6B and the provisions of Clause 6C shall *mutatis mutandis* apply to detailed proposals submitted pursuant to this Clause.

Additional proposals.

CL 4(3)(a)  
6/88

CL 4(3)(b)  
6/88

8. (1) The Company shall, in respect of the matters referred to in Clause 5 which are the subject of approved proposals under this Agreement, carry out a continuous programme of investigation and research including monitoring and the study of sample areas to ascertain the

Additional proposals for the protection and management of the environment.

effectiveness of the measures it is taking pursuant to its approved proposals for the protection and management of the environment.

CL 4(4)  
6/88

(2) The Company shall during the currency of this Agreement submit to the Minister not later than 31st December 1989 and the 31st December in each third year thereafter, a detailed report on the result of such investigations and research and the implementation by the Company of approved proposals relating to the protection and management of the environment during the three year period ending 31st October immediately preceding the due date for the detailed report together with a mining plan setting forth the proposed mining operations of the Company during the three year period commencing 1st November immediately preceding such due date and the programme proposed to be undertaken by the Company during that period in regard to investigation and research under subclause (1) of this Clause and the implementation by the Company of approved proposals relating to the protection and management of the environment.

Conti  
CL 4(4)  
6/1/88

- (3) The Minister may within 2 months of receipt of a detailed report pursuant to subclause (2) of this Clause notify the Company that he—
  - (a) approves the report and programme; or
  - (b) requires amendment of the programme for the ensuing 3 years; or
  - (c) requires additional detailed proposals to be submitted for the protection and management of the environment.
- (4) The Company shall within 2 months of receipt of a notice pursuant to paragraph (b) of subclause (3) of this Clause submit to the Minister an amended programme as required. The Minister shall afford the Company full opportunity to consult with him on his requirements during the preparation of any amended programme.
- (5) The Minister may within 1 month of receipt of an amended report or programme pursuant to subclause (4) of this Clause notify the Company that he requires additional detailed proposals to be submitted for the protection and management of the environment.
- (6) The Company shall within 2 months of receipt of a notice pursuant to subclause (3) (c) or subclause (5) of this Clause submit to the Minister additional detailed proposals as required and the provisions of Clause 6C shall *mutatis mutandis* apply to those proposals.
- (7) In addition to the reports provided for in subclause (2) the Company shall when required by the Minister from time to time, but not more frequently than once in every 12 months, submit to the Minister interim reports in a form and to a level of detail determined by the Minister of its investigations and research carried out pursuant to subclause (1) and its implementation of approved proposals relating to the environment

Clause 9 Deleted by cl 4(5) 6/1/88.

Use of local professional services, labour and materials.

- 10. (1) The Company shall for the purposes of this Agreement as far as it is reasonable and economically practicable—
  - (a) use the services of engineers, surveyors, architects and other professional consultants resident and available within the said State;
  - (b) use labour available within the said State;
  - (c) when calling for tenders and letting contracts for works materials plant equipment and supplies ensure that Western Australian suppliers manufacturers and contractors are given reasonable opportunity to tender or quote; and
  - (d) give proper consideration and where possible preference to Western Australian suppliers manufacturers and contractors when letting contracts or placing orders for works materials plant equipment and supplies where price quality delivery and service are equal to or better than that obtainable elsewhere.

(2) The Company shall from time to time during the currency of this Agreement when requested by the Minister submit a report concerning its implementation of the provisions of subclause (1) of this Clause.

# AMC MINERAL SANDS LTD

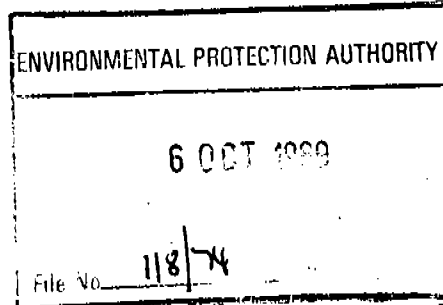


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5 October 1989



The Co-ordinator  
Department of Resources Development  
7th Floor  
170 St George's Terrace  
PERTH WA 6000

ATTENTION: MR J RIDGWAY

Dear Sir

## ENEABBA WEST

I refer to telephone discussions this morning with Mr J Ridgway of your Department and with Mr Digby Drake-Brockman of the Environmental Protection Authority concerning the possibility of deleterious effect on the Eneabba South Reserves from access roads for the Eneabba West Project. The roads in question will provide access to the Eneabba south concentrator and to the construction site via the gazetted Rocky Springs Road.

As indicated in our PER, these roads will be sealed to highway standard and require a high quality gravel as road base. The road sites themselves have been surveyed for rare species and dieback with negative results. A suitable source of gravel has been located on the project area in the Wilkinson property adjacent to R27886. A botanical survey, rare species search and dieback survey has been initiated on this site and you will be advised of the results. Further, we are developing a dieback hygiene programme for the project taking cognizance of Recommendation 3 of EPA Assessment Report.

On an ongoing basis, we can deal with the question of roads through the reporting provisions of the Mineral Sands (Eneabba) Agreement. We are currently preparing a Triennial Report for submission by year end. For practical purposes, roads fall into two categories:

- (i) long term roads required as part of the mine site infrastructure, and
- (ii) short term roads which provide access and services as the mine progresses.

The former are major roads, are in use for many years and would be rehabilitated upon decommissioning. The latter involve shorter term haul roads and tracks which are closed off and rehabilitated progressively along with the mined areas they serve. The sources of gravel for the construction of these roads consist of reclaimed material from roads being rehabilitated and oversize from the mining operation.

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Commencing with the Triennial Report currently in preparation, we are proposing to report on these specific activities in the following manner:

1. Mine infrastructure, including long term road network, administration, workshops, stores, fixed plant sites, and water supply facilities will be reported as area disturbed at the reporting date (ie end October) and projected for the next three years to show any proposed changes.
2. Mining and related services will also be shown as area disturbed at the reporting date and projected for the next three years.
3. Sources of gravel for roads, plant sites, etc, will be described, including reclaimed material, oversize and any other sources such as gravel pits.

On an annual basis, these matters will be reported on in the Interim Report which deals with activities over the previous 12 months.

As the Reports are referred to the Mineral Sands Agreements Rehabilitation Co-ordinating Committee, which includes representation from the Department of Conservation and Land Management and the Environmental Protection Authority, it is believed that these matters can be adequately and appropriately addressed through existing procedures. We believe that our proposal to provide additional information will assist the relevant authorities in these procedures.

Please advise if we can be of further assistance in this matter.

Yours faithfully  
AMC MINERAL SANDS LTD

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DENIS R BROOKS  
MANAGER ENVIRONMENTAL AFFAIRS

cc: ~~Director of Evaluation Division, EPA~~  
Technical Manager  
Operations Manager, Eneabba