



WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT

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

RARE EARTHS MINING & BENEFICIATION AT MT WELD, LAVERTON AND  
SECONDARY PROCESSING AT MEENAAR, NEAR NORTHAM (611)

ASHTON RARE EARTHS LTD

This proposal may be implemented subject to the following conditions:

**1 Proponent Commitments**

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Public Environmental Review and in response to issues raised following public submissions. These commitments are published in Environmental Protection Authority Bulletin 646, Appendices 1 and 2. (A copy of the consolidated commitments is attached.)

**2 Implementation**

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

**3 Environmental Management Programme**

A comprehensive environmental management programme is to be prepared and implemented to ensure that significant impacts on the environment resulting from the project are detected, reported on and managed promptly and correctly.

- 3-1 The proponent shall prepare an Environmental Management Programme for the management, monitoring, auditing and reporting of environmental impacts associated with the various elements and at appropriate times listed below, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority. This programme shall include, but not necessarily be limited to, the following elements:

Mine site and beneficiation operation, Mt Weld :

- 1 conservation of groundwater;
- 2 conservation of native flora and fauna;
- 3 residue disposal and wastewater management;
- 4 rehabilitation and decommissioning of disturbed sites, overburden dumps and residue ponds;

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- Secondary processing operation, Meenaar:
- 5 ground and surface water protection;
  - 6 residue disposal and wastewater management;
  - 7 emergency management for major seismic events;
  - 8 visual impacts and landscaping;

All aspects of the project:

- 9 radiation management; and
- 10 transport of ore concentrate, residues and dangerous goods.

Note 1:

The various elements above are to be prepared in consultation with and reviewed (at appropriate intervals) with advice from the following agencies:

Department of Minerals and Energy - 1 to 4, 7, 9 and 10.

Water Authority of Western Australia - 1, 3, 5 and 6.

Health Department of Western Australia - 3 and 6.

Radiological Council - 9.

Shire of Northam - 6, 7 and 8.

Note 2:

The various elements above are to be prepared according to the following timetable:

1 - prior to the start of dewatering at Mt Weld.

2, 3 and 4 - prior to further clearing at Mt Weld.

5, 6 and 8 - prior to construction of the secondary processing plant at Meenaar.

7, 9 and 10 - prior to commissioning of the secondary processing plant at Meenaar.

3-2 The proponent shall implement the Environmental Management Programme required by condition 3-1 to the requirements of the Environmental Protection Authority on advice of the appropriate agencies.

3-3 In the event that monitoring shows unacceptable environmental impacts, the proponent shall prepare and subsequently implement plans to mitigate these impacts to the requirements of the Environmental Protection Authority.

#### **4 Decommissioning**

The satisfactory decommissioning of the project, removal of the plant and installations and rehabilitation of the sites and their environs is the responsibility of the proponent.

4-1 At least six months prior to decommissioning of each site, the proponent shall prepare a decommissioning and rehabilitation plan for each site.

4-2 The proponent shall implement the plans required by condition 4-1.

#### **5 Proponent**

These conditions legally apply to the nominated proponent.

5-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister 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.

**6 Time Limit on Approval**

The environmental approval for the proposal is limited.

- 6-1 If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority.)

**7 Compliance Auditing**

In order to ensure that environmental conditions and commitments are met, an audit system is required.

- 7-1 The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.

**Procedure**

The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

**Note:** The proponent will be required to apply for Works Approvals and Licences for this project under the provisions of Part V of the Environmental Protection Act.

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Jim McGinty, M.L.A.  
MINISTER FOR THE ENVIRONMENT

9 NOV 1992

## PROPONENT'S CONSOLIDATED COMMITMENTS

### RARE EARTHS MINING & BENEFICIATION AT MT WELD, LAVERTON & SECONDARY PROCESSING AT MEENAAR, NEAR NORTHAM (611)

#### ASHTON RARE EARTHS LTD

The proponent has made the following environmental commitments:

#### 1 GENERAL

##### 1.1 PROJECT AMENDMENT

Commitment 1 Details of any plan to significantly alter the processing or operation of the project from that proposed in this PER would be referred to the EPA for environmental assessment.

##### 1.2 LEGISLATIVE COMPLIANCE

Commitment 2 The construction and operation of the project would be undertaken in accordance with the requirements of relevant Commonwealth, State and local authority legislation, regulations and codes of practice.

##### 1.3 MANAGEMENT PROGRAMME

Commitment 3 Prior to commissioning of facilities at Mt Weld and Meenaar, Ashton would prepare and submit an Environmental Management Programme that would address, where appropriate, the monitoring and management of the following:

- atmospheric emissions (Commitments 10, 20, 29)
- noise emissions (Commitments 11, 35, 36)
- water management at Mt Weld (Commitments 21, 23)
- chemical handling and storage (Commitment 25, 27)
- solid and liquid residues (Commitments 22, 30, 31, 33, 34)
- transport (Commitments 38, 40)
- workforce management (Commitment 16)
- rehabilitation and decommissioning (Commitments 17, 18, 19, 37)
- social impacts (Commitment 28).

The Environmental Management Programme would be developed in consultation with, and to the satisfaction of, the EPA.

Commitment 4 Prior to commissioning facilities at Mt Weld and Meenaar, Ashton would prepare and submit a Radiation Management Plan that would address the management and monitoring of occupational and environmental radiation issues associated with:

- mining and milling
- transport
- residue disposal

to the satisfaction of the Department of Minerals and Energy and the Health Department, with advice from the EPA.

## 1.4 ANNUAL REPORTING

- Commitment 5 Annual reports that described the actions undertaken to comply with these environmental management and monitoring commitments would be prepared by Ashton and submitted to the appropriate authority.

## 2 CONSTRUCTION

### 2.1 GENERAL

- Commitment 6 Ashton would not commence construction of the secondary processing plant until the design and status of the Meenaar Industrial Park buffer zone had been resolved to the satisfaction of the Minister for the Environment.
- Commitment 7 All construction materials and practices would comply with relevant Australian standards and codes of practice.
- Commitment 8 Solid refuse and material wastes would be removed from construction sites and disposed of in accordance with the requirements of the Shire of Laverton (for the Mt Weld site) and the Shire of Northam (for the Meenaar site).

### 2.2 REHABILITATION

- Commitment 9 Where practicable, vegetation and topsoil cleared during Mt Weld site preparations would be used to rehabilitate disturbed areas.

### 2.3 POLLUTION CONTROL

#### *Air*

- Commitment 10 Dust suppression measures, including application of water from tankers, would be implemented at Mt Weld and Meenaar to minimize dust generation during site preparation and construction activities.

#### *Noise*

- Commitment 11 Construction activities at Mt Weld and Meenaar would be carried out in accordance with statutory requirements relating to noise, and would incorporate appropriate management techniques to ensure that occupational and ambient noise levels were within acceptable limits set by the EPA and the Department of Occupational Health, Safety and Welfare.

## 3 RADIATION

### 3.1 GENERAL

- Commitment 12 The ALARA principle (which requires that exposures to radiation be kept as low as reasonably achievable, taking into account social and economic factors) would be adopted for all components of the project.

### 3.2 LEGISLATIVE COMPLIANCE

- Commitment 13 The Commonwealth requirements for radiation control outlined in the Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores 1987 and the Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores 1982 would be

met. Similarly, the Western Australian requirements for radiation control outlined in the Radiation Safety (General) Regulations 1983 would be met.

### 3.3 RADIATION PROTECTION DESIGN TARGETS

- Commitment 14 Under Ashton's commitment to the ALARA principle, radiation protection design targets to be adopted for all employees would be less than 2 mSv/a and would not require designation of employees as radiation workers, which would allow a 20 mSv/a dose limit under the International Commission on Radiological Protection draft recommendations (1990).
- Commitment 15 Under Ashton's commitment to the ALARA principle, radiation protection design targets to be adopted for members of the public would reduce the statutory 1 mSv/a required by the Commonwealth of Australia's Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores 1987 to 0.05 mSv/a.

## 4 MT WELD OPERATIONS

### 4.1 CONSERVATION

- Commitment 16 An education programme for all employees would be implemented to outline the purpose of imposing restrictions on domestic pets, firearms and recreational use of motor vehicles.

### 4.2 REHABILITATION AND DECOMMISSIONING

- Commitment 17 Ashton would participate in an appropriate programme to control feral animals (goats and rabbits), in consultation with the Agricultural Protection Board and pastoral owners, prior to the commencement of rehabilitation measures.
- Commitment 18 Rehabilitation at Mt Weld would be progressively undertaken in accordance with EPA and Department of Minerals and Energy's guidelines. Rehabilitation activities would be reported annually to the Department of Mines.
- Commitment 19 A plan outlining the decommissioning of the Mt Weld facilities would be prepared by Ashton before commencement of operational mining and commissioning of the beneficiation plant. The decommissioning plan would be prepared in consultation with the EPA and the Department of Mines. The decommissioning strategy would follow the guidelines of the Commonwealth of Australia's Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores 1982.

### 4.3 POLLUTION CONTROL

#### *Air*

- Commitment 20 Dust control measures would be implemented to comply with Department of Minerals and Energy's regulations.

#### *Water*

- Commitment 21 A water management plan, including water conservation, would be prepared by Ashton to detail appropriate measures to manage the groundwater resources in the carbonatite pipe area. The plan would be prepared prior to

the commencement of mining operations, in consultation with the EPA and the Water Authority.

Commitment 22 A management plan for the disposal of residues from the Meenaar secondary processing plant at Mt Weld would be prepared by Ashton prior to commissioning of the project. The plan would be prepared in consultation with the EPA and the Department of Minerals and Energy.

Commitment 23 A groundwater monitoring programme would be prepared in consultation with the Water Authority.

## 5 MEENAAR OPERATIONS

### 5.1 GENERAL

Commitment 24 Ashton would co-operate with other occupants of the Meenaar Industrial Park in the development of a comprehensive safety and environmental protection programme for the park.

### 5.2 SAFETY

Commitment 25 The storage and handling of hazardous materials would be undertaken in accordance with relevant statutes and codes, and Ashton would institute an ongoing worker safety training programme.

Commitment 26 An emergency management plan would be developed by Ashton prior to commissioning, in consultation with the Department of Minerals and Energy. The plan would include measures to be taken in the event of seismic activity.

Commitment 27 The LPG storage vessel would be designed and operated in accordance with *LP Gas: Storage and Handling* (AS 1596—1989), and would incorporate safety measures such as a fixed water spray (deluge) system as described in that standard.

### 5.3 SOCIAL

Commitment 28 Social impact monitoring would be undertaken to address local issues.

### 5.4 POLLUTION CONTROL

#### *Air*

Commitment 29 A programme would be established upon commissioning to monitor the following parameters:

- concentration and mass emission rate of sulphur dioxide
- concentration of oxides of nitrogen
- volume flow rate
- temperature
- boiler fuel feed rate over the duration of the test.

#### *Water*

Commitment 30 A total containment policy would be adopted for wastewater and surface runoff from the plant area.

- Commitment 31 Studies would be undertaken by Ashton during the design phase of Stages II and III to identify an economic means of removing the nitrate from the wastewater before it entered the evaporation ponds.
- Commitment 32 Plans and associated documentation for the design of the Meenaar facility and evaporation ponds to withstand predicted seismic events would be prepared by Ashton prior to construction, in consultation with the EPA and the Water Authority.
- Commitment 33 A groundwater monitoring programme would be implemented. The results of this monitoring would be issued annually to the Water Authority and the EPA.

### *Solids*

- Commitment 34 Ashton would continue to investigate the feasibility of selling the calcium phosphate material produced from regeneration of caustic soda or otherwise making it available to others (for possible use as fertilizer feedstock).

### *Noise*

- Commitment 35 All potential noise-generating equipment would incorporate effective sound-proofing measures such that, during the operation of the plant at full capacity, noise at the nearest residence would not exceed those limits set by the EPA.
- Commitment 36 A noise monitoring programme would be implemented.

## 5.5 DECOMMISSIONING

- Commitment 37 A plan outlining the decommissioning of the secondary processing plant would be prepared by Ashton before commissioning the plant, in consultation with the EPA. This decommissioning strategy would follow the guidelines of the Commonwealth of Australia's Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores 1982.

## 6 TRANSPORT OPERATIONS

### 6.1 LEGISLATIVE COMPLIANCE

- Commitment 38 Transport and handling procedures would comply with the requirements of the Commonwealth of Australia's Code of Practice for the Transport of Dangerous Goods by Road and Rail 1987 and the Commonwealth of Australia's Code of Practice for the Safe Transport of Radioactive Substances 1990, together with the Western Australian Dangerous Goods Regulations 1992 and the Radiation Safety (Transport of Radioactive Substances) Regulations 1991.

### 6.2 EMERGENCY PROCEDURES

- Commitment 39 Emergency procedure guides and emergency contacts would be documented and available in vehicle cabs, and all drivers would be instructed in the actions, as specified under the Western Australian Hazardous Materials Emergency Management Scheme, to be taken in the event of an accident.

### **6.3 MONITORING**

**Commitment 40** A programme of occupational health and safety monitoring of transport drivers would be developed by Ashton prior to commissioning, in consultation with the Health Department.

### **6.4 REVIEW OF TRANSPORT OPTIONS**

**Commitment 41** Ashton would undertake a further comparative review of the practicability of the transport options (road-rail versus road only) for the Mt Weld project prior to the commencement of construction of transport-related facilities at Mt Weld and Meenaar. The results would be made available to the EPA.