



WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT

Ass # 794
Bull # 700
State # 326

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

**EXTENSION OF DIAMOND MINING INTO BEEFWOOD CREEK (M80/109) & MINING
LEASE M80/288, LISSADELL STATION, EAST KIMBERLEY (794)**

POSEIDON BOW RIVER DIAMOND MINE LIMITED

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 Consultative Environmental Review and in response to issues raised following public submissions. These commitments were published in Environmental Protection Authority Bulletin 700 as Appendix 1. (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 Decommissioning

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

- 3-1 At least six months prior to decommissioning, the proponent shall prepare and submit a final decommissioning and rehabilitation plan.
- 3-2 The proponent shall implement the plan required by condition 3-1.

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4 Proponent

These conditions legally apply to the nominated proponent.

- 4-1 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.

5 Time Limit on Approval

The environmental approval for the proposal is limited.

- 5-1 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.)

6 Compliance Auditing

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

- 6-1 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

- 1 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.
- 2 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.
- 3 The detailed implementation of this project will be controlled via the conditions to be imposed by the Minister for Mines under the Mines Act. (A draft set of conditions was published in Environmental Protection Authority Bulletin 700, Appendix 2, and a copy is attached).
- 4 The final decommissioning and rehabilitation plan required by condition 3 may be incorporated into the proponent's Annual Report required under the Mines Act, and if so, it shall be forwarded to the Environmental Protection Authority.


Kevin Minson MLA
MINISTER FOR THE ENVIRONMENT

27 OCT 1993

APPENDIX 1

PROPONENT'S CONSOLIDATED COMMITMENTS

**EXTENSION OF DIAMOND MINING INTO BEEFWOOD
CREEK (M80/109) & MINING LEASE M80/288
EAST KIMBERLEY (794)**

POSEIDON BOW RIVER DIAMOND MINE LIMITED

The proponent has made the following environmental commitments:

PROPOSAL: APPLICATION TO EXTEND BOW RIVER DIAMOND
MINE ON M80/109 AND M80/288 (794)

LOCATION : BOW RIVER

PROPONENT: POSEIDON BOW RIVER DIAMOND MINE LTD.

SUBJECT: ENVIRONMENTAL COMMITMENTS

COMMITMENTS

Poseidon Bow River Diamond Mine Pty Ltd makes the following specific commitments regarding environmental protection and rehabilitation.

1. Mining would occur only in those areas identified in this report and in the areas previously approved. It is expected that mining operations in the proposed areas would be complete by 1994-95.
2. Mining and rehabilitation would be progressive, with topsoil and overburden being used immediately, where possible, to rehabilitate mined-out pits.
3. The occurrence of pest species, including *Parkinsonia aculeata*, would be monitored and appropriate measures taken to control any infestations resulting from, or associated with, mining or rehabilitation activities.
4. At the end of the Project all equipment would be removed, all disturbed areas rehabilitated, and the area left clean and tidy.
5. The proponent intends to comply with all provisions of all relevant Acts including the Mining Act 1978-81 and Regulations, the Environmental Protection Act 1986 and the Aboriginal Heritage Act 1972-1980.

Rehabilitation procedures would be as follows:

LEASE M80/288 MINING AREA

6. After the diamondiferous ore has been mined, the pit would be partly backfilled with waste. The waste would be shaped to approximately flat, with hollows left to act as sediment traps for local drainage. The shaping would make these areas drain internally, so that any carried sediment would not be transported into the Lake Argyle system.

7. Vegetation debris and topsoil which was previously removed and stockpiled would be respread over the waste. While it is planned to revegetate the mined area with species similar to those originally present, it might be necessary to plant any initial cover crop to stabilise the area as quickly as possible.
8. The area would be revegetated so as to allow pastoral activities to continue on the less heavily wooded areas after mining has ceased. As the original vegetation on lease M80/288 is trees and pasture, BRD would restore the land to the same mixture of vegetation. Stock exclusion fences would be erected to prevent cattle damage to immature growth.

AREAS OF DISTURBANCE ALONG BEEFWOOD CREEK

The main rehabilitation involved in this area would be the re-establishment of a stable drainage bed.

9. After ore has been removed the area would be backfilled with waste. The creek bed would be reconstructed as near as possible to the original position. The original bed levels would be re-established so as to minimise flow disruption.
10. "Where original slopes were steep an effort would be made to reconstruct the channel with shallow sides to reduce erosion and to provide a wider cross section for lower flow rates. The sides and floor of the creek would be armoured with + 100mm waste rock in these areas".
11. Attention would be paid to sections where the reinstated channel meets the undisturbed channel. The "meeting" point would blend gradually from one stage to the next, with adequate armouring being provided. Efforts would be made to ensure that no erosion problems are caused due to sudden changes in bed profile which would in turn cause changes in water flow velocity.
12. In order to prevent runoff scouring the new banks, small "bunds" or windrows would be established on the channel margins to contain water.

13. The area would be revegetated with similar trees as originally occurred in the area, Boab (*Adansonia gregorii*), Bauhinia (*Lysiphyllum cunninghamii*) and Wild Plum (*Terminalia platyphylla*). Couch grass (*Cynodon dactylon*) would also be used due to its good soil stabilisation characteristics.
14. "No mining will occur in the channel of Beefwood creek during the wet season. Mining in the channel will cease, and mined areas of the channel will be reinstated and armoured before the 1st December each year".
15. "Areas susceptible to scouring due to water movement, within the rehabilitation, will be repaired with rock armouring or other method to reduce the damage".
16. BRD would undertake all the work involved in the above commitments. The Department of Minerals and Energy and the Environmental Protection Authority together, with advice from the Department of Agriculture would evaluate when rehabilitation has been achieved to a satisfactory level to allow pastoral activity to recommence".

APPENDIX 2

MINES ACT DRAFT CONDITIONS

**MINING LEASES M80/109 & M80/288
EAST KIMBERLEY**

RECOMMENDED FURTHER CONDITIONS - MINING LEASE 80/288

Conditions on the schedule should be amended to read;

13. The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled;
 - a) "Bow River Alluvial Diamond Project Notice of Intent" dated September 1987,
 - b) "Poseidon Bow River Diamond Mine, Proposal for a New Tailings Dam", submitted September 1989,
 - c) "Consultative Environmental Review, Bow River Alluvial Diamond Project Expansion" dated May 1990,

and

- d) "Consultative Environmental Review. Proposal to extend mining operations into Beefwood Creek M80/109, and portion of mining lease M80/288 Bow River Diamond Mine " dated June 1993.

Documents retained on Department of Minerals and Energy File 281/88, 393/88 and 117/93.

Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.

14. The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.
15. All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.
16. At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer.
17. All rubbish and scrap being progressively disposed of in a suitable manner.
18. At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer.

19. Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained.

The bond Condition should be included as follows;

20. The lessee providing an Unconditional Performance Bond guaranteed by a Bank or other approved financial institution in favour of the Minister of Mines in the sum of \$120,000 for due compliance with the environmental conditions of the lease.
21. The lessee submitting to the State Mining Engineer in May of each year, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months.
22. The mining area will be revegetated to open Eucalyptus woodland, structurally and floristically similar to the pre-mining plant communities. Young trees will be kept free of excessive competition with introduced cover crop species.

RECOMMENDED AMENDED OR FURTHER CONDITIONS ON M80/109

Condition 17 on the schedule should be amended to read;

The construction and operation of the project and measures to protect the environment to be carried out generally in accordance with the documents titled;

- a) "Bow River Alluvial Diamond Project Notice of Intent" dated September 1987,
- b) "Poseidon Bow River Diamond Mine, Proposal for a New Tailings Dam", submitted September 1989,
- c) "Consultative Environmental Review, Bow River Alluvial Diamond Project Expansion" dated May 1990.

and

- d) "Consultative Environmental Review. Proposal to extend mining operations into Beefwood Creek M80/109, and portion of mining lease M80/288. Bow River Diamond Mine" dated June 1993.

Documents retained on Department of Minerals and Energy Files 281/88, 393/88 and .../93.

Condition 18 on the schedule should be amended to read;

Prior to the commencement of operations within Beefwood Creek the lessee will provide an Unconditional Performance Bond (guaranteed by a Bank or other approved financial institution) in favour of the Minister for Mines in the sum of \$35,000 for due compliance with the environmental conditions on the lease.

A further recommended Condition should read;

- 19) Indigenous creekline tree species shall be re-established at densities which approximate the pre-mining situation. Young trees will be kept free of excessive competition with introduced cover crop species.