

**Extension of mining operations on mining leases
80/112 and 80/113, Limestone Creek,
Lissadell Station**

Poseidon Bow River Diamond Mine Ltd

Proposed changes to environmental conditions

**Report and recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
Perth, Western Australia
Bulletin 721
November 1993**

THE PURPOSE OF THIS REPORT

This report contains the Environmental Protection Authority's environmental assessment and recommendations to the Minister for the Environment on the environmental acceptability of the proposal.

Immediately following the release of the report there is a 14-day period when anyone may appeal to the Minister against the Environmental Protection Authority's report.

After the appeal period, and determination of any appeals, the Minister consults with the other relevant ministers and agencies and then issues his decision about whether the proposal may or may not proceed. The Minister also announces the legally binding environmental conditions which might apply to any approval.

APPEALS

If you disagree with any of the contents of the assessment report or recommendations you may appeal in writing to the Minister for the Environment outlining the environmental reasons for your concern and enclosing the appeal fee of \$10.

It is important that you clearly indicate the part of the report you disagree with and the reasons for your concern so that the grounds of your appeal can be properly considered by the Minister for the Environment.

ADDRESS

Hon Minister for the Environment
12th Floor, Dumas House
2 Havelock Street
WEST PERTH WA 6005

CLOSING DATE

Your appeal (with the \$10 fee) must reach the Minister's office no later than 5.00 pm on 9 December, 1993.

1. Background

Poseidon Bow River Diamond Mine Limited received approval to mine on leases 80/112 and 80/113 on 17 October, 1990, subject to a number of legally binding environmental conditions, including a commitment that mining would only occur in those areas identified in the two reports on the mining operation (Appendix 1; Ministerial Statement that proposal may be implemented).

That approval was given after an investigation of the site, the preparation of a Consultative Environmental Review, the receipt of public and government agency submissions, and the release of the Environmental Protection Authority's Report and Recommendations on the proposal (EPA Bulletin 445).

Poseidon Bow River Diamond Mine Ltd is now seeking to extend the mining operations outside the area originally identified, and has provided a Notice of Intent describing the proposal.

2. The proposal

Poseidon Bow River proposes to extend the mining operation outside the area previously approved. It proposes to amend part of Figure 2 in the Consultative Environmental Review, which shows the approved mining areas, with Figure 1 in this Report (Figure 3 in the Notice of Intent) which shows the additional areas. The additional areas consist of :

- 18ha located 800m west of existing mining area (Southern Orebody) on ML 80/113, including mining of Limestone Creek; and
- 27ha located 600m east of existing mining area (Southern Orebody) on ML 80/112.

The existing southern orebody mining area consists of 144ha. Poseidon Bow River has proposed to conduct the mining and rehabilitation in these new areas in accordance with the commitments made in the Consultative Environmental Review, May 1990. Those commitments are incorporated into the Minister for the Environment's Statement.

3. Advice of the Environmental Protection Authority

The EPA consulted with the relevant agencies shown on Table 1.

Table 1. Agencies consulted

Water Authority of Western Australia
Department of Agriculture
Manager, Lissadell Station
Department of Minerals and Energy
Shire of Wyndham-East Kimberley
Kimberley Land Council
Miriwunga Gajerronga Ningguwung Yawurrung Inc.

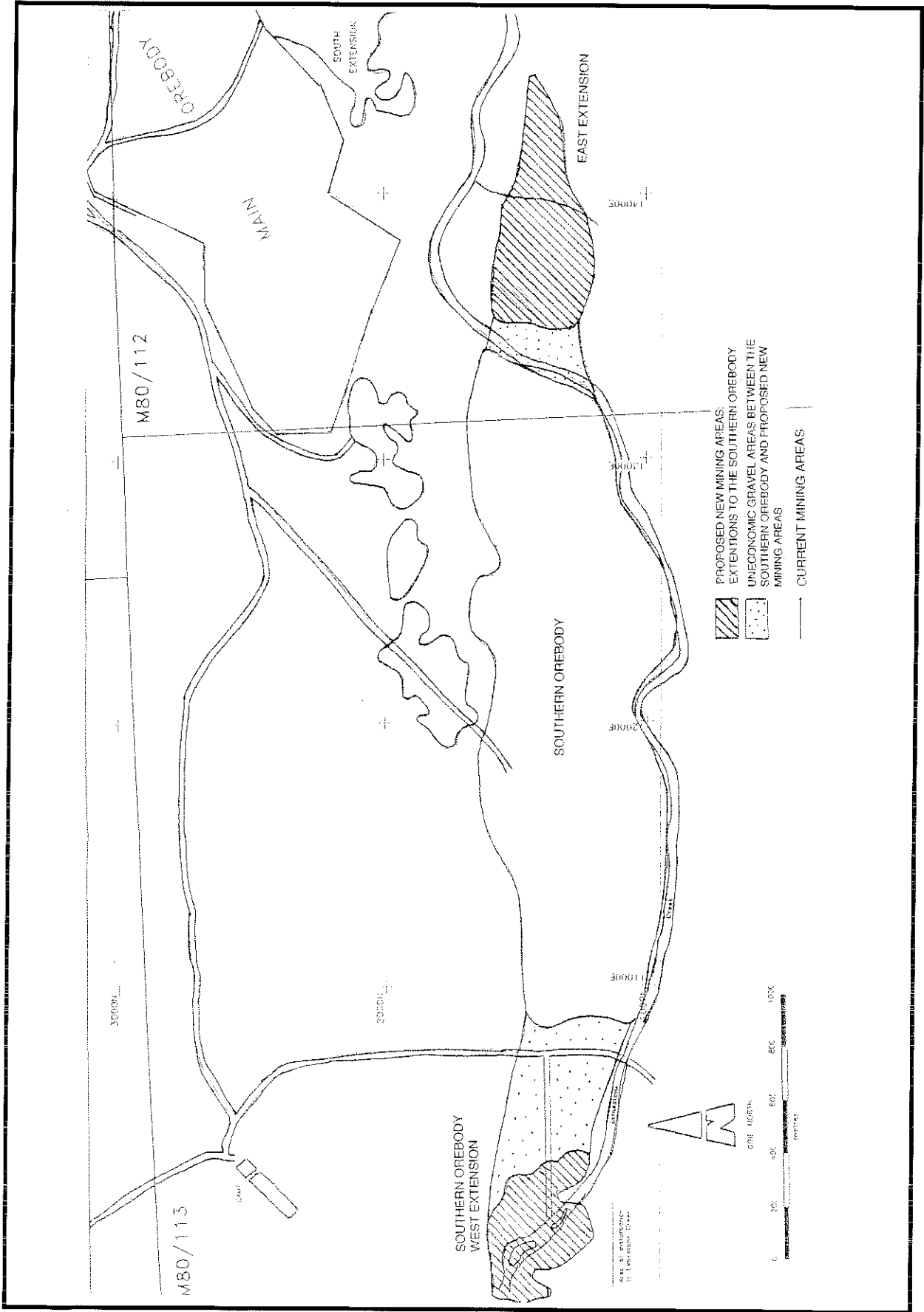


Figure 1. Proposed amendment to mining areas

The Water Authority provided advice on Poseidon Bow River's proposal on 5 April 1993 and identified four aspects of concern. These concerns were specifically addressed in Poseidon's Notice of Intent. The Water Authority had no further concerns.

The Department of Agriculture has provided advice that, provided the current processes of land rehabilitation are continued, it has no concerns about the proposal. Poseidon is committed to rehabilitate this additional area to the agreed post-mining land use of pastoral use (cattle grazing).

No other agencies consulted have identified any environmental issues with the proposal.

Regulatory agencies for the existing mining operation have indicated that the final land use objectives are being met by the existing rehabilitation programme.

On the basis that rehabilitation has been successful on the existing area and that the same rehabilitation programme will be applied to the new areas, the Environmental Protection Authority concludes that the proposal to extend the mining operation is environmentally acceptable and makes the following recommendation:

Recommendation 1

The Environmental Protection Authority recommends that the proposal to extend the mining operation be approved under the same conditions as currently apply. The Authority recommends that Condition 1 in the Ministerial Statement published 17 October 1990 be amended to include the additional areas proposed for mining, as shown in Figure 1.

In the next section, the Environmental Protection Authority has detailed the changes to the Minister for the Environment's Statement which amend the Environmental Conditions. The Authority recommends that the Minister amend Condition 1 to incorporate the implementation of the amended commitments. The Authority also recommends that the Minister take the opportunity to include the standard condition on compliance auditing in order to allow the effective auditing of the amended conditions and commitments.

Recommendation 2

The Environmental Protection Authority recommends that the standard implementation and compliance auditing conditions be included in the conditions for this proposal.

The recommended amended environmental conditions which implement these recommendations are detailed below.

4. Recommended amended environmental conditions

STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

PROPOSAL: POSEIDON BOW RIVER DIAMOND MINE EXPANSION,
KIMBERLEY
CURRENT PROPONENT: POSEIDON BOW RIVER DIAMOND MINE LIMITED
CONDITIONS SET ON: 17 OCTOBER 1990

Condition 1 is amended to read as follows:

1A Proponent Commitments

In implementing the proposal (including the documented modifications of August 1993) and providing that the commitments are not inconsistent with the conditions or procedures in this statement, the proponent shall fulfil the relevant commitments made in the Consultative Environmental Review, the commitments made in documentation on the modified proposal of August 1993, and the environmental management commitments which are consolidated in Environmental Protection Authority Bulletin 445 as Appendix 1. (A copy of the consolidated commitments is attached).

1B Implementation

Subject to the conditions in this amended statement, 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.

The following condition and procedure are inserted following condition 5:

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.

Appendix 1

**Statement of Conditions of Approval for the Poseidon Bow River
Diamond Mine, Kimberley**



WESTERN AUSTRALIA
MINISTER FOR THE ENVIRONMENT

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

POSEIDON BOW RIVER ALLUVIAL DIAMOND MINE EXPANSION, KIMBERLEY

This proposal may be implemented subject to the following conditions:

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 Appendix 1 of the Environmental Protection Authority Bulletin 445 which consolidates responses to issues raised during the assessment. (A copy of the commitments is attached).
2. 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. The proponent shall be responsible for decommissioning and removal of the plant and installations and rehabilitating the site and its environs to the satisfaction of the Environmental Protection Authority. At least twelve months prior to cessation of mining and processing operations, the proponent shall prepare and subsequently implement a decommissioning and rehabilitation plan to the satisfaction of the Environmental Protection Authority upon advice from the Department of Mines and the Water Authority of Western Australia.
4. 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. 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).

Bob Pearce, MLA
MINISTER FOR THE ENVIRONMENT

16 OCT 1990

Published on

17 OCT 1990

Appendix 1

Proponent's environmental commitments

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

1. Mining will occur only in those areas identified in this report and in the previous NOI.
2. Mining and rehabilitation will be progressive, with topsoil and overburden being used immediately, where possible, to rehabilitate mined-out pits.
3. Erosion control structures including bunds and sediment traps will be constructed along the length of the mining area to ensure that run-on and run-off are kept to a minimum.
4. When mining occurs close to Limestone Creek, special measures, as detailed in Sections 6.3 and 7.10.3 (of the Consultative Environmental Review) will be employed to minimise impacts on the creek.
5. Coarse waste dumps and tailings dams are, and will be, designed so as to minimise erosion and to remain stable in the long term.
6. The occurrence of *Parkinsonia aculeata* will be monitored and appropriate measures taken to control any serious infestations resulting from, or associated with, mining or rehabilitation activities.
7. At the end of the project, all equipment will be removed, all disturbed areas rehabilitated, rubbish removed or buried and the area left clean and tidy to the satisfaction of the EPA and the Mines Department.
8. The proponent intends to comply with all provisions of all relevant acts including the Mines Act and Regulations, and the Environmental Protection Act.
9. It is PBR's intention to set up a photographic monitoring procedure, to appoint a person or agency to provide monitoring reports as required, and to instigate remedial action if necessary.
10. PBR is also prepared to make a commitment that, when mining operations impinge on Limestone Creek, not more than 300m of the creek will be disturbed at any time. Thus, the 'window' of disturbed land will travel along the creek, with restructured land surface left behind. This will ensure that any erosion which did not occur in a rainfall event was localised and, if necessary, more easily controlled.
11. Poseidon Bow River will obtain the approval of the District Mining Engineer, Department of Mines, for the engineering design and rehabilitation of the coarse rejects dump prior to extending the height of the dump beyond 10m.