



WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT

Ass #	888
Bull #	750
State #	365

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

PROPOSAL: ALLUVIAL DIAMOND MINE EXPANSION,
SMOKE CREEK, ARGYLE (607/888)

CURRENT PROPONENT: ARGYLE DIAMOND MINES PTY LIMITED

CONDITIONS SET ON: 28 JANUARY 1992

The implementation of this proposal is now subject to the following conditions which replace all previous 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, including the documented modifications of May 1994, which include mining an additional area downstream of approximately 550 hectares, the proponent shall fulfil the commitments made in the 1991 Consultative Environmental Review and in the "Additional Proposal and Environmental Report, May 1994" reported on in Environmental Protection Authority Bulletin 750; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement. (A copy of the commitments as modified in May 1994 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.

Published on

20 SEP 1994

3 Vegetation

- 3-1 Where, in the opinion of the Department of Environmental Protection, natural regeneration of native vegetation is inadequate in areas under rehabilitation, the proponent shall supplement the vegetative cover with seeds or plants, to the requirements of the Department of Environmental Protection in consultation with the Department of Minerals and Energy.

4 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.

- 4-1 At least six months prior to decommissioning, the proponent shall prepare a decommissioning and rehabilitation plan.
- 4-2 The proponent shall implement the plan 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 modified project within five years of the date of this statement, then approval to implement the proposal as granted in the statement of 28 January 1992 shall lapse and be void. The Minister for the Environment shall determine any question as to whether the modified 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, in consultation with the Department of Environmental Protection, shall prepare an Audit Programme, which includes requirements for the preparation of periodic Compliance Reports.
- 7-2 The proponent shall subsequently implement the Audit Programme required by condition 7-1.

The proponent may include the compliance reporting as part of the environmental reporting obligations pursuant to the Diamonds (Argyle Diamond Mines Joint Venture) Agreement Act.

Procedure

- 1 The Department of Environmental Protection 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 Department of Environmental Protection, 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.

Kevin Minson MLA
MINISTER FOR THE ENVIRONMENT

19 SEP 1994

Proponent's Environmental Management Commitments

as modified in May 1994

**ALLUVIAL DIAMOND MINE EXPANSION
SMOKE CREEK, ARGYLE (607/888)**

ARGYLE DIAMOND MINES PTY LIMITED

MANAGEMENT COMMITMENTS

Major commitments to environmental management by Argyle Diamond Mines Pty Limited are summarised as follows:

1. A continuous monitoring programme will be carried out to determine the effectiveness of measures taken for protection and rehabilitation of the environment. Reports will be submitted to the Minister for State Development when reasonably required by the Minister.

Argyle Diamond Mines currently submits environmental reports on an annual and triennial basis, and this procedure will be continued for this proposed programme.

2. Clearing of vegetation, direct return of the surface soil and direct return of overburden will be carried out progressively and in accordance with the rate of mining. In the event of direct return not being possible, temporary stockpiles will be utilised.
3. The amount of land cleared in advance of the mining face will be restricted to that necessary for a practical but efficient operation.
4. Individual trees and clumps of trees, where appropriate, will be identified and retained as part of the rehabilitation programme.
5. As the mining face advances, reject material from the alluvial process plant will be returned to the mined area and re-spread to form an undulating surface.
6. The Smoke Creek drainage line will be reinstated by either re-shaping returned gravels or by not completing the backfill process and utilising voids left after mining. Selection of the method used will be subject to the need for practical and efficient movement of the ore trucks in the mining operation and take into account the hydrology of the area where possible.
7. On completion of backfilling, alluvial overburden will be re-spread if it has been stockpiled, and topsoil will then be re-spread across the surface.
8. Deep ripping will be carried out where practicable to break down areas compacted during the backfilling operation and to incorporate the surface material into the upper surface of the gravels.
9. Vegetation material cleared in the site preparation operation will be returned to the area and re-spread to provide the basis for habitat restoration.

10. If erosion control works or absorption banks are required as part of the rehabilitation process, these will be designed and installed prior to the onset of the wet season.
11. Monitoring of revegetation work will continue as part of the current mining project, including continued seeding trials in suitable areas. Seeding will generally be timed to coincide with the onset of the wet season.
12. During the wet season, specific monitoring programmes will be carried out to confirm hydrologic design parameters and to assess the overall performance of techniques being utilised.
13. The rehabilitation programme commences immediately after mining with re-shaping of backfilled gravels. Re-spreading of topsoil and vegetation material generally occurs within several weeks, and earthworks will be constructed before the onset of the wet season.
14. The environmental management programme and associated works will be carried out to the satisfaction of the EPA on advice from the Department of Mines, and in accordance with practices relevant at the time.

RESPONSIBILITY

Argyle Diamond Mines Pty Limited will carry out the proposed alluvial mining operation using a reputable mining and earth-moving contractor. Conditions relating to environmental protection will be developed by ADM and will form part of all contracts for the programme.

Environmental staff at Argyle diamond mine will supervise all aspects of the operation that relate to environmental management including review of contractor performance.

Detail design work will be carried out by staff of the Environmental section who will also supervise construction and be accountable for the implementation and completion of rehabilitation programmes.

Consultation is carried out on a regular basis with officers of the Department of Agriculture in Kununurra, and these consultations and inspections will continue through the proposed programme. Similarly, appropriate officers within the EPA will be expected to visit the operation and contribute to environmental management strategies being implemented or proposed.

The proposed alluvial mining operation will be continually monitored and evaluated by site personnel. This action is necessary to ensure the adequacy of site-specific design and, in terms of overall environmental management, to ensure that strategy goals will be achieved.



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Argyle Diamond Mines Pty. Limited
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WEST PERTH WA 6872

Our Ref 17/79 V4
Enquiries Michelle Mifka

Dear Mr Wither

**ALLUVIAL DIAMOND MINE EXPANSION, SMOKE CREEK,
ARGYLE (STATEMENT 365)**

I refer to your request of 5 May 1998 to the Department of Environmental Protection detailing Argyle Diamond Mines Pty. Limited's proposal to extend mining into Smoke Creek alluvial terraces A2 and B2.

Officers of this Department have provided their advice to me regarding the environmental significance of these changes to the project and conclude that the changes can be managed under the existing conditions.

I consider the proposed changes to the project to be non-substantial. Accordingly, under Condition 2 of the environmental approval of 20 September 1994:

I advise that the proposed changes, as described in correspondence of 5 May 1998, may be implemented as part of the Alluvial Diamond Mine Expansion, Smoke Creek, Argyle project.

Please note that the above information refers to environmental issues in the Statement of 20 September 1994. This does not remove the necessity to obtain any approvals which may be required by other agencies.

Yours sincerely

(Dr) Bryan Jenkins
CHIEF EXECUTIVE OFFICER

Date: 17.6.98

The proposed activities and areas to be affected are similar to those of the existing operation and the proposed changes do not significantly alter the scale of the operation. A vegetation survey of the B2 terrace during June 1997 identified the Priority One taxa *Phyllanthus aridus* which is widespread throughout the study area. As a result, topsoil management will be more rigorously supervised, and areas of *Phyllanthus aridus* will be included with the clumps as part of Argyle's tree retention activities. Rehabilitation will also be undertaken using the same techniques that have been used in earlier mined areas.

Aboriginal heritage surveys have been conducted, and no sites of aboriginal heritage significance occur in or near the proposed mining areas.

Mining in Smoke Creek alluvial terraces A2 and B2 will not give rise to any inconsistencies with the existing statement of environmental approval. Management activities specified as commitments in the statement can be applied, and are appropriate, to the modified proposal. Rehabilitation and decommissioning plans required by conditions of statement 365 will need to accommodate the new areas of Smoke Creek alluvial terraces A2 and B2 and the company is aware of this. The statement contains a condition (Condition 2) which allows the Minister for the Environment to approve non-substantial changes to the proposal on the advice of the Environmental Protection Authority (EPA).

4. CONCLUSION(S) AND RECOMMENDATION(S)

I conclude that the potential environmental impact of the proposed changes can be managed under the existing environmental conditions and commitments set for this project, and therefore the changes can be considered to be non-substantial changes.

I recommend that the Chief Executive Officer, under delegation from the EPA, advise the Proponent that the changes to the Alluvial Diamond Mine Expansion, Smoke Creek, Argyle may be considered non-substantial changes to the proposal.

Please find attached a letter to the Proponent for your signature should this advice be accepted.

MEMO TO: Chief Executive Officer
FROM: Michelle Mifka, Resources Development Branch
Rob Holmes, Environmental Audit Branch
SUBJECT: Proposed changes to proposal
DATE: June 10, 1998

Project: Alluvial Diamond Mine Expansion, Smoke Creek, Argyle

Proponent: Argyle Diamond Mines Pty. Limited

Statement No: 365 Branch Manager

DEP File: 17/79 V4 Audit Branch Manager

Assessment No: 607 & 888 Director

[Signature] date: 10/6/98
[Signature] date: 10/6/98
[Signature] date: 10/6/98

1. BACKGROUND

The Alluvial Diamond Mine Expansion, Smoke Creek, Argyle was assessed at the level of Consultative Environmental Review (CER) in 1992 and approved by the Minister for the Environment on 28 January 1992. A subsequent Section 46 (S46) was approved by the Minister for the Environment on 20 September 1994 (Attachment 1).

Argyle Diamonds Pty Limited (Argyle) has written to the Department of Environmental Protection (DEP) advising that it proposes to extend mining into two small areas, consisting of Smoke Creek alluvial terraces A2 and B2 (Attachment 2).

Argyle has indicated that it would like the extension of mining into Smoke Creek alluvial terraces A2 and B2 to be considered as non-substantial changes to the proposal under Condition 2 of the statement of environment approval (365).

2. PROPOSED CHANGES TO PROPOSAL

Argyle have been mining diamonds from the alluvial gravel deposits in the Smoke Creek area at the Argyle Diamond Mine since 1983. During subsequent years, the alluvial mining moved downstream from the area just north of the AK1 orebody located in the headwaters of the creek system. Two small areas, Smoke Creek alluvial terraces A2 (approximately 10 hectares) and B2 (approximately 20 hectares) were not discussed in the CER and the S46 applications.

Argyle proposes to mine these two areas to finalise the mining in Smoke Creek prior to moving to the Limestone Creek area. Limestone Creek is currently pending determination by the Minister for Resources Development under Clause 10 of the *Diamond (Argyle Diamond Mines Joint Venture) Agreement Act 1981-1983*.

The characteristics of these two areas are identical to the adjacent areas previously mined.

3. ASSESSMENT OF THE PROPOSED CHANGES

The environmental impacts of the proposed mining of Smoke Creek alluvial terraces A2 and B2 can be managed under the existing environmental conditions/commitments for this project (Statement 365). In addition, the relatively small scale of the proposed changes enables them to be considered as non-substantial changes under Condition 2 of the statement of environmental approval for this project.