

Extension of Busselton mineral sands operation, change to environmental conditions

Cable Sands (WA) Pty Ltd

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

**Environmental Protection Authority
Perth, Western Australia
Bulletin 716
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 **18 November 1993**.

Environmental Impact Assessment (EIA) Process Timelines in weeks

Date	Timeline commences from receipt of full details of proposal by proponent	Time (weeks)
28 August 1993	Request for changes to proposal referred to EPA	8
26 October 1993	Minister requested EPA to report on proposed changes to proposal	
8 November 1993	EPA reported to the Minister for the Environment	1

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Background and recommendation

The Environmental Protection Authority has been requested by the Minister for the Environment to inquire into and report on whether or not the conditions for Busselton Mineral Sands Operation should be changed under Section 46 of the Environmental Protection Act 1986.

The Minister for the Environment issued environmental conditions for Busselton Mineral Sands Operation on 30 August, 1989. These conditions were based on the recommendations made in the Environmental Protection Authority's Bulletin 390 published in July 1989.

The proponent, Cable Sands (WA) Pty Ltd proposes to mine a small extension to the orebody on land adjacent to the current minesite, approximately 5 kilometres east of Busselton (Figure 1). The proposed extension is a continuation of one of the strandlines that is currently being mined at the Busselton site. The deposit is located on privately owned land held under pre-1899 title and therefore the Mining Act does not apply to environmental aspects of the operation.

The method of mining would be identical to that used at the existing operation. Ore would be extracted using front end loaders and then oversize material would be separated from the undersize using a screening unit. The undersize would be transported to a primary separation plant via a conveyor system to extract the heavy mineral concentrate from the undersize fraction.

Most of the infrastructure is in place to mine the proposed extension, however the proposal would involve relocating a primary separation plant to the Busselton site and would take approximately 18 months to mine. It is anticipated that mining of the proposed extension would be completed at approximately the same time as mining of the existing Busselton resource.

The proposed extension would involve clearing 12.8 hectares (ha) of privately owned land which includes 9 ha of remnant Peppermint forest and 3.8 hectares of pasture. The area of low Peppermint forest that would be cleared includes Peppermint trees (*Agonis flexuosa*), Marri (*Eucalyptus calophylla*), *Banksia attenuata*, and *Banksia grandis*. Vegetation surveys were conducted and no rare flora were identified.

The habitat value of the vegetation on a regional scale is low. The area has been extensively grazed by kangaroos and thus contains an extremely sparse understorey. A preliminary fauna survey of the area proposed for mining located a small population of Western Ringtail Possums which are declared threatened fauna. The proponent has made an agreement with the Department of Conservation and Land Management (CALM) to relocate any ringtail possums found in the area that would be cleared.

The rehabilitation process would be fully integrated with mine production. The aims of the rehabilitation process would be identical to those for the existing operation and include:

- saving all topsoil;
- restoring all areas affected by the mining operation to landforms that are compatible with the surrounding areas;
- covering all the restored landforms with the original topsoil;
- restoring all topsoiled areas to the pre-mining vegetation status, which would be either pasture or Peppermint forest; and
- ensuring that the rehabilitated Peppermint forest provides an appropriate habitat for the Western Ringtail Possum.

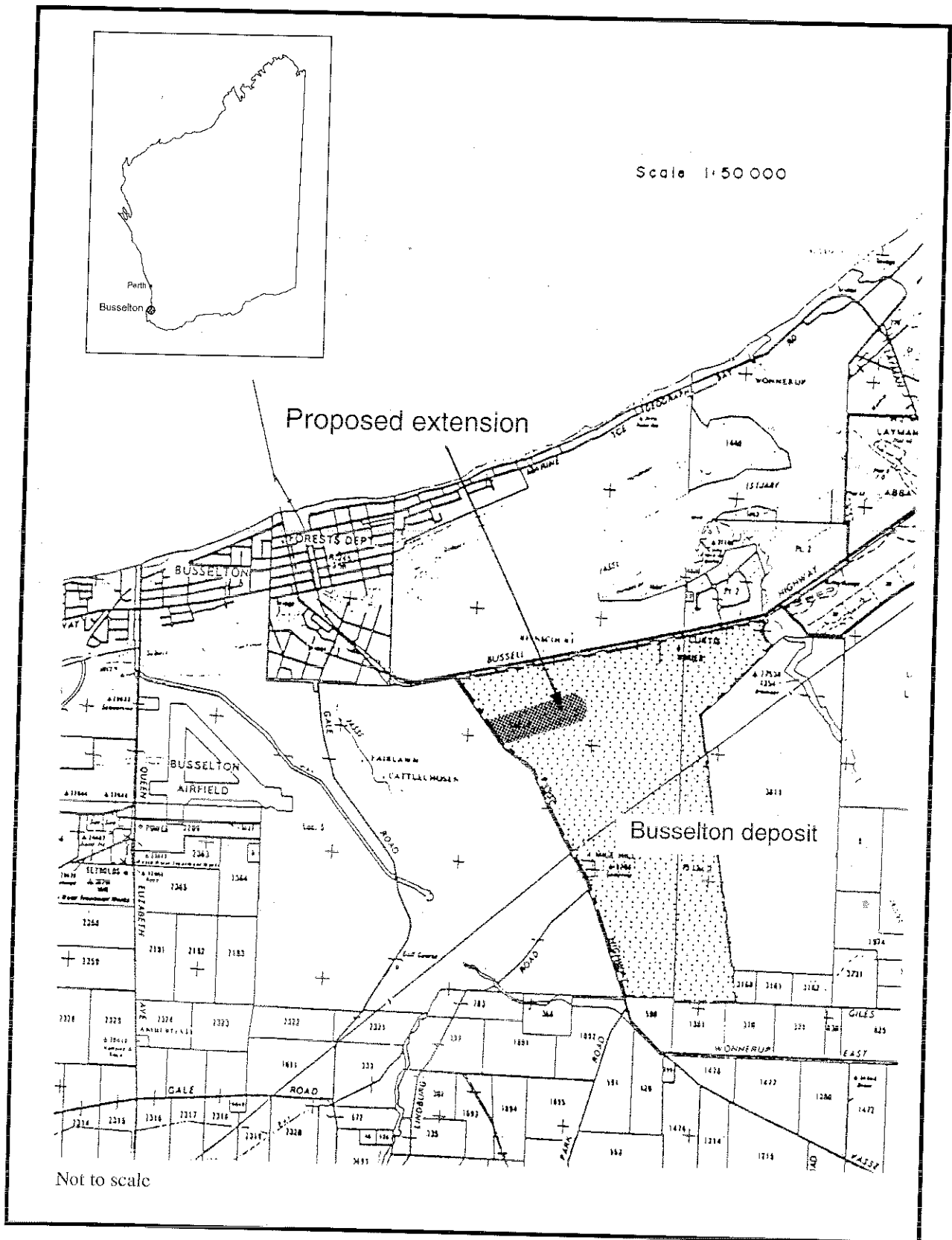


Figure 1: Location of proposed extension and existing mine

The proponent has negotiated the right to mine with the land owner. The proponent also liaised with a local conservation group, neighbouring landowners and users. Discussions between the Shire of Busselton and the proponent concerning planning matters and changes to the Extractive Industries Licence are ongoing.

Since the Environmental Statement was issued for the existing Busselton Mineral Sands Operation, some of the standard environmental conditions have been altered. The Environmental Protection Authority considers that the environmental conditions should be updated.

Following consideration of the Notice of Intent, the previous assessment and consultation with other government agencies, the Authority considers that the environmental issues related to the proposal are manageable and has concluded that the proposal is environmentally acceptable. Accordingly, the Authority has made the following recommendation:

Recommendation

The Environmental Protection Authority recommends that the proposed extension is environmentally acceptable as described in the Notice of Intent and that the environmental conditions placed on the existing Busselton Mineral Sands Operation should be updated and applied to the existing mining operations and the proposed extension. (Recommended Environmental Conditions are listed in Section 2)

2. Recommended Environmental Conditions

Based on its assessment of this proposal and the recommendations in this report, the Environmental Protection Authority considers that the following Recommended Environmental Conditions are appropriate for the existing mining operations and the proposed extension:

1 Implementation

The proposal as assessed may be implemented, though changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 1-1 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.

2 Proponent Commitments

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

- 2-1 In implementing the proposal, 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 Notice of Intent and the environmental management commitments which are consolidated in Environmental Protection Authority Bulletin 716 as Appendix 1. (A copy of the consolidated commitments is attached.)

3 Monitoring

Monitoring is required to ensure satisfactory environmental management of the mining and rehabilitation operations.

3-1 The proponent shall monitor the mining and rehabilitation operations to the requirements of the Environmental Protection Authority on the advice of the Department of Minerals and Energy, and shall immediately notify these agencies of any impacts identified.

3-2 The proponent shall take immediate measures to ameliorate any undesirable impacts to the requirements of the Environmental Protection Authority on the advice of the Department of Minerals and Energy.

3-3 Reports of monitoring results should be submitted annually together with recommendations for the next 12 months operations .

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 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.

8 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 a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act.

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Appendix 1

Proponent's updated list of environmental management commitments

2. PROPONENT COMMITMENTS TO ENVIRONMENTAL MANAGEMENT

Cable Sands (WA) Pty Ltd agrees to the following commitments, relating to the proposed extension, and is prepared to accept them as conditions of mining.

1. Cable Sands will comply with the relevant statutory requirements of the State of Western Australia and the Commonwealth of Australia.
2. Cable Sands will continue to operate in accordance with the Code of Practice on Radiation Protection in the Mining and Processing of Mineral Sands, and monitor and report to the authorities as requested by the Department of Minerals and Energy.
3. Mined land will be restored to permanent pastures, where appropriate, in consultation with the landowners. Trees will be established for stock shelter and for regional landscaping purposes.
4. After mining and primary separation of the minerals from the sand and clay, the clay will be incorporated into the sand, especially in the surface horizon of the new soil profile to enhance the water retention capacity of the sands.
5. All topsoil will be saved and returned to the restored landforms as a final layer.
6. Rehabilitation will follow the mining front closely and be fully integrated with production.
7. Groundwater will not be contaminated.
8. Cable Sands will continue to liaise closely with the Shire of Busselton to keep the Shire fully informed of issues of interest to them.
9. Cable Sands will inform the Department of Minerals and Energy and the Western Australian Museum immediately in the event of finding material of archaeological interest or sites of cultural importance to Aboriginal people. The Company will abide by the Aboriginal Heritage Act.
10. Dust and noise levels will be kept to a minimum.
11. A report will be submitted annually to the Department of Minerals and Energy outlining mining progress, rehabilitation, radiation monitoring and dust and noise control. This report will be confidential.
12. Cable Sands will rehabilitate any areas cleared of Peppermint forest in consultation with the Department of Conservation and Land Management so as to provide a suitable habitat for the Western Ringtail Possum.
13. Cable Sands will initiate a programme to control Arum lilies in the area.
14. In the event that surveys indicate that re-location of individual Western Ringtail Possums is required, Cable Sands will support such action in consultation with the Department of Conservation and Land Management.

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