



Statement No.

MINISTER FOR THE ENVIRONMENT;
LABOUR RELATIONS

000508

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

HEAVY MINERALS MINE AT JANGARDUP

Proposal: The Jangardup heavy minerals mine is located on the Scott Coastal plain within the Shire of Nannup. The proposal involves mining and processing a maximum of 410,000 tonnes of heavy mineral concentrate per year. The concentrate is then trucked from the mine to Bunbury via Black Point Road, Stewart Road and the Vasse and Bussell Highways and exported through the Port of Bunbury.

Proponent: Cable Sands (WA) Pty Ltd

Proponent Address: Koombana Drive, North Shore, Bunbury WA 6230

Assessment Number: 1206

Previous Assessment Numbers: 116 and 1041

Previous Statement Numbers: Statement No. 103 (published on 20 July 1990)

Statement No. 455 (published on 23 July 1997)

Report of the Environmental Protection Authority: Bulletin 932

Previous Reports of the Environmental Protection Authority: Bulletins 422
(January 1990) and 859 (June 1997)

The implementation of this proposal is now subject to the conditions contained in Ministerial Statement No. 103 (July 1990) as amended by Statement No. 455 (July 1997), subject to the amendment and addition of the following conditions, procedures and notes:

Condition 1 of Statement No. 455 is deleted and the following conditions are inserted:

1 Proponent Commitments

1-1 The proponent shall implement the consolidated environmental management commitments as amended on 3 June 1997 and 9 April 1999 and documented in schedules 2 and 3 of this statement.

1-2 The proponent shall implement environmental management commitments which the proponent makes or has made as part of the fulfilment of conditions and procedures in this and any previous statements issued for this proposal.

Published on

- 4 JUN 1999

Condition 10 of Statement No. 455 is deleted and the following conditions are inserted:

10 Implementation

- 10-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 10-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 10-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

Procedures 1 and 2 of Statement No. 455 are deleted and the following conditions and procedures are inserted:

11 Compliance Auditing

- 11-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.
- 11-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal, written advice that the requirements have been met.
- 11-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

Note 1 of Statement No. 455 is deleted and Note 2 renumbered as Note 1 as follows:

Note

- 1 The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act 1986.

CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT

- 4 JUN 1999

Schedule 1

Proposal (1206)

The Jangardup heavy minerals mine is located on the Scott Coastal Plain within the Shire of Nannup, approximately 47 kilometres south of Nannup (Figure 1). The proposal involves mining and processing a maximum of 410,000 tonnes of heavy mineral concentrate per year. The concentrate is then trucked from the mine to Bunbury via Black Point Road, Stewart Road and the Vasse and Bussell Highways and exported through the Port of Bunbury.

Table 1 summarises the key project characteristics of the approved project and proposed extension.

Table 1: Key project characteristics

Project characteristic	Current approved project	Proposed extension
Life of project (mine production)	99 months	1 month
Orebody (tonnes heavy mineral concentrate)	2,100,000	20,000
Depth of mining	20 metres	Approximately 15 metres
Area of disturbance (ha)	250	4
Typical mine operation	7 days per week (24 hours per day)	7 days per week (24 hours per day)
Major components	Dredge mining of orebody with some dry mining. Slime dams, water dam, wet treatment plant, thickener, concentrate towers, workshops, offices, access roads and substation. Rehabilitation following mining to pasture and State Forest.	Development restricted to ore body area. Rehabilitation of mined area back to acceptable native vegetation standards to allow Nelson Location 13471 to be incorporated in the D'Entrecasteaux National Park at a later date. No major infrastructure located on the reserve.
Mining rate (tpa heavy mineral concentrate)	286,000	286,000
Maximum mining rate (tpa heavy mineral concentrate)	410,000	410,000
Water supply:		
• source	Bore into Yarragadee	Bore into Yarragadee
• annual requirement (ML)	803	803

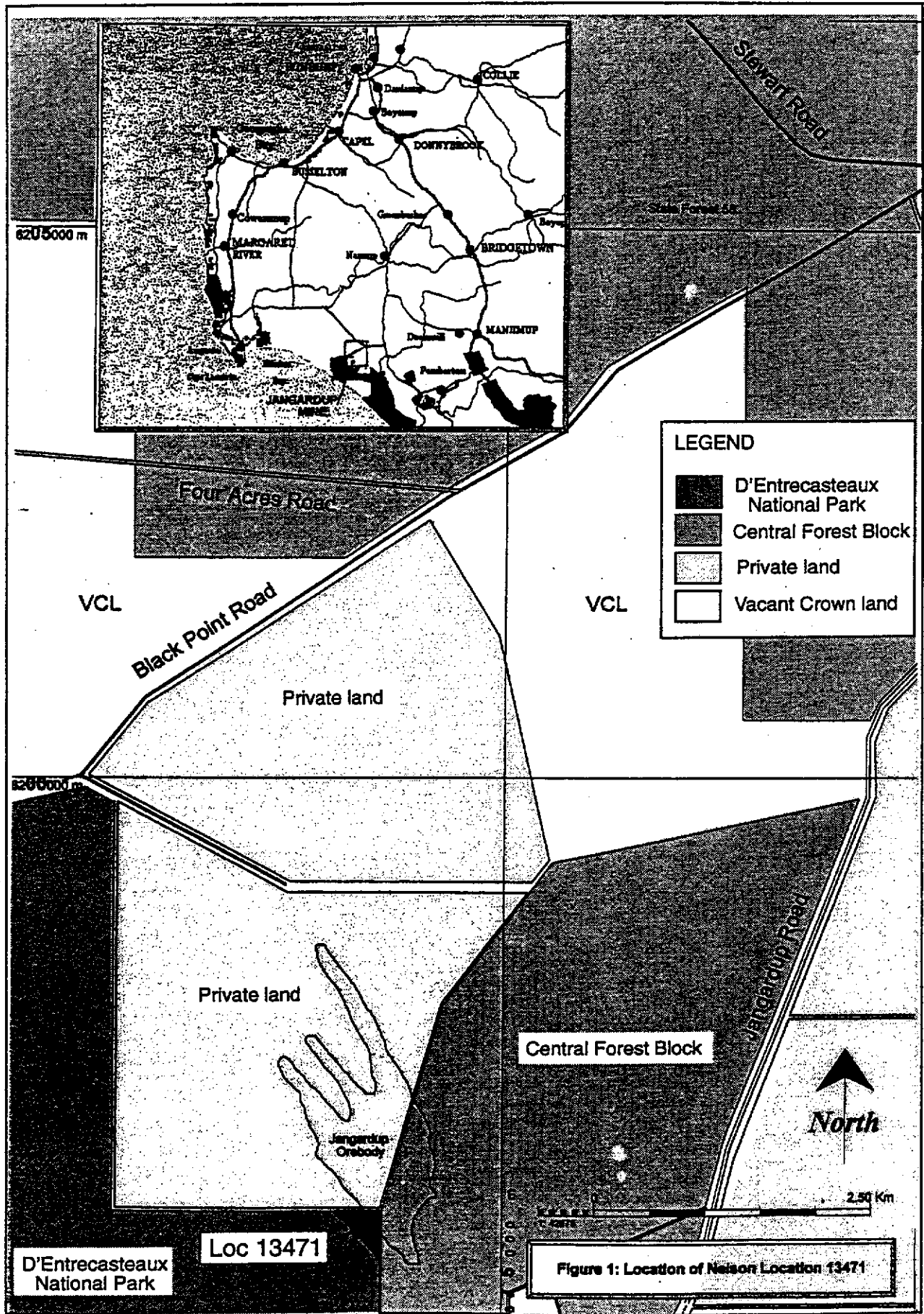


Figure 1. Location Nelson Location 13471 (Source: Cable Sands, 1998).

Proponent's Environmental Management Commitments

**3 June 1997
(as edited April 1999)**

**Heavy Minerals Mine at Jangardup
(116/1041/1206)**

Cable Sands (WA) Pty Ltd

- 1 The proponent agrees to comply with the relevant statutory requirements of both the State of Western Australia and the Commonwealth of Australia.
- 2 Site preparation prior to mining will be as described in the Environmental Review and Management Programme.
- 3 The mining operations and the heavy minerals separation process will comply with the descriptions presented in the Environmental Review and Management Programme.
- 4 All topsoil will be used for covering restored landforms, and there will be no loss of topsoil.
- 5 Rehabilitation will be fully integrated with mine production and it will be undertaken continuously, some one to two months behind the dredging front. Rehabilitation will comply with the guidelines presented in the Environmental Review and Management Programme.
- 6 The proponent will be operating in the area for many years and will maintain the responsibility for rehabilitation until the defined endpoints are achieved. Successful rehabilitation will be determined by the Department of Minerals and Energy, using the endpoints outlined in the Environmental Review and Management Programme.

The endpoints will be accepted by the proponent as a condition.

- 7 Water usage, electricity generation, access roads, and sewerage and rubbish disposal will be carried out as described in the Environmental Review and Management Programme and will not be varied greatly without prior consultation with the authorities.
- 8 All workers will be kept within radiation standards set by the Department of Minerals and Energy for the heavy minerals mining industry in compliance with the Australian Code of Practice on radiation protection in the mining and milling of radioactive ores of 1987.
- 9 Every effort will be made to protect regrowth of plants on the rehabilitated areas from fire and weed encroachment.
- 10 Part of the rehabilitation process will be to create a range of habitat types.
- 11 In the event that material of Aboriginal origin is uncovered during the operations, all work will cease within that area and the Western Australian Museum will be called upon to advise.
- 12 Dust and noise levels will be kept below the standards which are currently set for the mining industry.
- 13 Groundwater levels and the quality of groundwater around the dredge pond and the production bore will be monitored by the proponent.

All data will be analysed and should there be any evidence of unacceptable changes, action will be implemented immediately to avoid any harmful changes to the water regimes of the area. The authorities will be notified immediately.

- 14 Monitoring of the rehabilitation will be undertaken by the proponent and reported annually to the Department of Minerals and Energy, the Department of Conservation and Land Management and the Environmental Protection Authority.

- 15 The contribution of funds to encourage the establishment of extra houses in Nannup.
- 16 Prior to mining the ponds area, checking for the existence of aquatic fauna outside the area to be mined.
- 17 Transportation of heavy mineral concentrate between Jangardup and Bunbury will use the Sues Road route whenever this is available, subject to appropriate approvals.

Any trucking of heavy mineral concentrate along the Vasse Highway route through Nannup will be undertaken under the regime which has applied since trucking commenced in 1994.

**Proponent's Additional Environmental
Management Commitments**

9 April 1999

**Heavy Minerals Mine at Jangardup
(116/1041/1206)**

Cable Sands (WA) Pty Ltd

Commitment (Who/ What)	Objective (Why)	Action (How/ where)	Timing (When)	Whose Advice	Measure- ment Compliance Criteria
18. The proponent will regularly monitor surface water flows from all Jangardup mining leases.	To minimise impacts of surface water quality on downstream users	Surface flows off all Jangardup mining leases monitoring locations and frequencies to be consistent with DEP Licence 6662/1	Throughout mining operation	DEP WRC	Advice with annual reports.
19. Any results indicating an unacceptable deterioration in surface water quality will result in the appropriate action determined in consultation with the DEP and WRC.	To minimise impacts of surface water quality on downstream users	Surface flows off all Jangardup mining leases monitoring locations and frequencies to be consistent with DEP Licence 6662/1.	Throughout mining operation	DEP WRC	Advice with annual reports.
20. The proponent will prepare a Mining and Restoration Plan for the Jangardup Extension area. The plan will include clearing restrictions, landform restoration (reconstructed land will be consistent with adjoining unmined landforms), dieback management, vegetation re-establishment, weed management, completion criteria and monitoring of rehabilitation success.	To ensure appropriate management of operations	In extension area.	Prior to mining the extension area.	DEP CALM DME	Clearance of Mining and Restoration Plan.
21. The proponent will implement the Mining and Restoration Plan for the Jangardup Extension area.	To ensure appropriate management of operations	In extension area	Throughout mining operation	DEP CALM DME	Advice with annual reports. Letter from DEP.
22. The proponent will undertake anthropological and archaeological investigations for the extension area.	To ensure aboriginal heritage values are protected.	In extension area.	Prior to mining the extension area.	DAA	Letter from DAA.

Abbreviations:

DEP: Department of Environmental Protection
WRC: Water and Rivers Commission
CALM: Department of Conservation and Land Management
DME: Department of Minerals and Energy
DAA: Department of Aboriginal Affairs