



WESTERN AUSTRALIA
MINISTER FOR THE ENVIRONMENT

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

GOLDSWORTHY EXTENSION PROJECT PHASE 2 -
YARRIE PROJECT AREA, EAST PILBARA (753)

BHP IRON ORE (GOLDSWORTHY) 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 are consolidated in Environmental Protection Authority Bulletin 673 as Appendix 1. (A copy of the 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 environmentally substantial, those changes may be effected.

3 Water Management

- 3-1 Prior to the commencement of productive mining, the proponent shall prepare a water management programme to the requirements of the Minister for the Environment on advice of the Water Authority of Western Australia and the Department of Minerals and Energy. This programme shall be based upon hydrogeological studies and shall include consideration of, but not be limited to:

- 1) surface water monitoring and management procedures;
- 2) groundwater dewatering impacts, monitoring and management procedures; and
- 3) long term management of any water bodies which expose the water table to long term evaporation.

- 3-2 The proponent shall implement the water management programme required by condition 3-1.

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4 Fauna Management

- 4-1 Prior to the commencement of any clearing or construction activity on the mine site, excluding the railway, the proponent shall conduct a fauna survey and prepare a fauna management plan to the requirements of the Minister for the Environment on advice of the Department of Conservation and Land Management.
- 4-2 The proponent shall implement the fauna management plan required by condition 4-1.

5 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.

- 5-1 At least six months prior to decommissioning, the proponent shall prepare a decommissioning and rehabilitation plan.
- 5-2 The proponent shall implement the plan required by condition 5-1.

6 Proponent

These conditions legally apply to the nominated proponent.

- 6-1 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.

7 Time Limit on Approval

The environmental approval for the proposal is limited.

- 7-1 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.)

8 Compliance Auditing

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

- 8-1 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

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 1 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.

Note 2 Under the provisions of the *Iron-Ore (Goldsworthy-Nimingarra) Agreement Act 1972* changes to the manner of implementation or ownership of the proposal also require approvals from the Minister for State Development.

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Jim McGinty, MLA
MINISTER FOR THE ENVIRONMENT

- 4 FEB 1993

PROPONENT'S COMMITMENTS

GOLDSWORTHY EXTENSION PROJECT PHASE 2 -
YARRIE PROJECT AREA, EAST PILBARA (753)

BHP IRON ORE (GOLDSWORTHY) LIMITED

The proponent has made the following environmental commitments:

7.1 CLEARING OF VEGETATION

Only the minimum area required for construction and operation of the project will be disturbed. Where practicable, topsoil to a depth of about 15cm will be stripped and stockpiled prior to any earthmoving and, once construction is completed, all disturbed areas no longer required for the operation of the facility will be contoured (where necessary), topsoiled (where available), ripped and seeded where necessary.

7.2 DEVELOPMENT POLICY

BHP will pursue a "minimum impact" development policy which will include minimum clearing and ground disturbance, minimum groundwater abstraction, minimum water discharge, careful monitoring and effective rehabilitation. Adherence to this policy will be a requirement written into the mining contracts.

7.3 RAILWAY CREEK CROSSINGS

Care will be exercised at all stages of construction to minimise damage to drainage channels. Culverts will be utilised along the rail route to avoid interference with the natural surface drainage. Large culverts will be utilised to cross Eel Creek.

7.4 SHADOWING EFFECTS OF RAILWAY LINE

BHP will establish a programme to monitor and evaluate the health of vegetation downslope of the railway embankment. If any adverse impacts are revealed by this monitoring, BHP will take steps as necessary to mitigate those impacts.

7.5 BORROW PITS

Borrow pits for all construction materials will be selected and operated to minimise erosion and land disturbance. Where possible, pits will be located where they are not visible from the village or access roads. The BHP-Newman Guidelines and Objectives for Borrow Pit Development and Rehabilitation (Appendix D) will be applied.

7.6 WATER SUPPLIES

Water supplies will be preferentially obtained from bores drilled into the Yarrie plateau adjacent to the mine pit. Water will be abstracted from the Eel Creek aquifer only if supplies from the plateau are insufficient to meet project requirements.

7.7 MONITORING OF DRAWDOWNS AND WATER QUALITY

If water is abstracted from the Eel Creek aquifer, BHP will monitor the groundwater levels and water quality in the aquifer to detect excessive drawdown or water quality changes. If significant effects are observed, the health of vegetation in the creekbed will be monitored and steps taken to mitigate adverse impacts.

7.8 SURFACE WATER DISCHARGES

Water produced from dewatering will be used, as much as possible, for domestic and mine uses. The minimum possible amount will be discharged to the natural surface drainage. BHP will monitor the quality of all water discharged to the environment from pit dewatering or other sources. Water discharged to natural drainage will comply Works Approvals and Licences issued under Part V of the *Environmental Protection Act 1986*.

7.9 HYDROGEOLOGICAL INVESTIGATIONS

Hydrogeological investigations will continue with the aims of better defining the aquifers of the Yarrie area, identifying sources of project water supply, predicting drawdown effects and modelling the effect of salinity buildup in the mined-out Y2 pit. The results of these investigations will be used to optimise the water abstraction and dewatering programmes and the long-term management of the mined-out pit.

7.10 EROSION CONTROL

Erosion around roads and building areas will be controlled by minimisation of clearing, rehabilitation, proper drainage and bunding where necessary. Erosion at creek crossings and culverts will be minimised by the use of rock armouring and careful design. Regular inspections will be carried out to detect and repair any erosion damage which does occur.

7.11 OVERBURDEN

The overburden storage site will be designed to be stable and to resist erosion. At the completion of mining, the surface of the overburden will be rehabilitated.

7.12 HAZARDOUS MATERIALS STORAGE

The handling, use and disposal of hazardous materials will comply with all local and State regulations. Bulk fuel will be stored in above-ground tanks held in impermeable, banded enclosures, in accordance with Department of Minerals and Energy (DOME) requirements. Explosives will be stored in a magazine remote from accommodation facilities, workshops, the mine site and any areas susceptible to flooding.

7.13 OILY WASTES

Used oils will be stored securely in drums or tanks and will be periodically removed by a licensed waste disposal contractor for recycling or disposal at a Shire Council-approved site.

Runoff and wastewater from areas subject to hydrocarbon contamination, such as workshops and washdown bays, will be drained to evaporation ponds where sunlight and bacteria will decompose the hydrocarbons. Water contaminated with hydrocarbons will not be released to the environment.

7.14 LANDFILLS

Landfills for the disposal of non-toxic (including domestic) wastes will be managed in accordance with relevant local health authority requirements.

7.15 FIRE PREVENTION

BHP will maintain firefighting equipment at the mine site in case of accidental fires. The induction briefing given to all site personnel will include the prevention of accidental fires.

7.16 WEEDS

Regular inspections of the vegetation adjacent to the railway line, roads and rehabilitated areas to ensure that weed infestation is not occurring. Any infestations discovered in the area will be dealt with by appropriate physical or chemical means.

7.17 PEBBLE-MOUND MOUSE NESTS

Disturbance of areas where Pebble-mound Mouse nests are located will be avoided wherever possible. BHP will undertake detailed surveys of Pebble-mound Mouse populations in the project area as described in Section 5.0 to provide data for their proper management.

7.18 GENERAL FLORA AND FAUNA PROTECTION

Pets (dogs and cats), firearms and indiscriminate use of off-road vehicles will be prohibited in the project area.

7.19 NOISE

Blasting will be carried out at specified times during daylight hours to minimise noise impacts at the village. Occupational noise levels will be monitored and managed as required under Works Approvals and Licences issued under Part V of the *Environmental Protection Act 1986*.

7.20 DUST CONTROL

Normal means of dust suppression, including watering of roads, will be employed to minimise dust generation. Occupational dust levels will be monitored and managed as required under Works Approvals and Licences issued under Part V of the *Environmental Protection Act 1986*.

7.21 EMPLOYMENT

The mining contractor will be encouraged to source the operational workforce from the Pilbara, including Karratha and Wickham as well as Port Hedland and Newman. Former BHP employees accepting redundancy from Shay Gap will, if they indicate interest, be made known to the contractor and, if suitable, the contractor will be encouraged to employ them.

7.22 COMMUNITY LIAISON

BHP will continue to consult with Aboriginal custodians of the project area and the owners of the neighbouring pastoral leases. BHP will respect the "no-go" areas agreed to with the Aboriginal elders.

7.23 REHABILITATION

Procedures developed by BHP in the Pilbara will be applied to rehabilitation at Yarrie. The object of the rehabilitation will be to ensure that, at the end of the project, all disturbed surfaces (with the exception of the mine pits) are returned to a stable condition with a flora and fauna which approaches the natural condition of the site.

7.24 DECOMMISSIONING

Following the completion of the project, buildings and other structures will be removed. Concrete slabs will be broken up and buried. The rehabilitation of the overburden will be completed. Remaining borrow pits will be rehabilitated. All unwanted bare or compacted areas will be contoured (where necessary), ripped and seeded. Monitoring of the rehabilitated areas will be undertaken to gauge success. This monitoring will continue until the vegetation is seen to be progressing towards a condition similar to that which existed before mining.

7.25 YARRIE PIT LONG-TERM SALINITY

BHP will continue to monitor the salinity of water in the Goldsworthy pit for several years to determine the future likelihood of saline water seeping from the pit into the De Grey River aquifer. The results of this monitoring will be used to formulate management strategies for the Yarrie pit if necessary.

7.26 PROJECT MANAGEMENT

The Yarrie project will be overseen by BHP environmental officers to ensure that the environmental management programme is adhered to. The commitments made to environmental protection in this CER will be written into the contracts for construction and mining. Regular internal audits will be carried out to ensure that the environmental management programme is being fulfilled and that no unacceptable environmental impacts are occurring.