

**Yandicoogina (Marillana) iron ore project —
change of ministerial condition due to increase in
rate of production**

BHP Iron Ore Limited

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

**Environmental Protection Authority
Perth, Western Australia
Bulletin 622
April 1992**

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 recommendations.

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 assessment report 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
18th Floor, Allendale Square
77 St George's Terrace
PERTH WA 6000

CLOSING DATE

Your appeal (with the \$10 fee) must reach the Minister's office no later than 5.00 p.m. on 24 April, 1992.

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Pursuant to Section 46(1) of the Environmental Protection Act, the Minister for the Environment has asked the Environmental Protection Authority to inquire and report on modifications to the proposal for the Yandicoogina (Marillana) Iron Ore Project.

BHP-Utah Minerals International submitted a Public Environmental Report for the Yandicoogina (Marillana) Iron Ore Project to the Environmental Protection Authority in November 1987. Following assessment of the Public Environmental Report by the Environmental Protection Authority, the Minister for the Environment issued environmental approval, including conditions, on 27 May 1988 (Appendix 1). This approval contained a copy of the proponent's commitments which remain applicable to the modified proposal.

The modifications to the original proposal stem from the proponent's desire to increase production from the present five million tonne per annum to a rate of 10 million tonne per annum. This has resulted in the need to upgrade the capacity of the plant by the following modifications:

- an additional five tertiary crushers;
- an additional two production screens; and
- new conveyor systems to feed ore to and receive ore from the tertiary crushers.

The remainder of the ore processing facilities, infrastructure and the final pit limits will not change. The increased mining rate will mean the orebody will be notionally mined out over 16 years rather than 32 years as previously envisaged at the lower production rate.

The Environmental Protection Authority has assessed the modification to the original proposal and does not regard them as having the potential to significantly impact on the environment. It considers that the modifications can be adequately dealt with via the pollution control provisions of Part V of the Environmental Protection Act.

The modification will require a change to the Ministerial conditions on the proposal to reflect the change to the proposal as assessed by the Environmental Protection Authority in 1988.

Recommendation 1

The Environmental Protection Authority regards the modifications to the Yandicoogina (Marillana) Iron Ore Project due to the increase in the rate of production to 10 million tonnes per year as being environmentally acceptable and recommends that Condition 1 of the Ministerial statement for the proposal of 27 May 1988 be deleted and replaced by the following condition.

1. In implementing the proposal, including the increased production rate of 10 million tonnes per year, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Public Environmental Report. (A copy of the commitments is attached).

Recommendation 2

The Environmental Protection Authority recommends that the following standard conditions be added to the Ministerial Statement for the project to ensure conformity with recent statements.

The Authority notes that during the detailed implementation of proposals, it is often necessary or desirable to make minor and non-substantial changes to the designs and specifications which have been examined as part of the Authority's assessment. The Authority believes that

subsequent statutory approvals for this proposal could make provision for such changes, where it can be shown that the changes are not likely to have a significant effect on the environment.

- 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.

The statement should include a "transfer" clause which has been used in all recent statements issued by the Minister for the Environment and which allows for a continuity of environmental responsibility by any new proponent.

- No transfer of ownership, control or management of the project which would give rise to the need for a replacement 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.

Appendix 1

Ministerial statement that a proposal may be implemented



MINISTER FOR ENVIRONMENT

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

YANDICOOGINA (MARILLANA) IRON ORE PROJECT

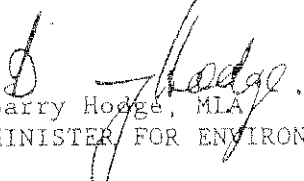
BHP - UTAR MINERALS INTERNATIONAL

This proposal may be implemented subject to the following conditions:

1. The proponent shall adhere to the proposal as assessed by the Environmental Protection Authority and shall fulfil the commitments made (copy of commitments attached).
2. The proponent shall undertake regular monitoring of creek bed vegetation and sediment movement in the Marillana Creek system to assess any changes that occur as a result of the mine water discharge and shall ameliorate adverse effects to the satisfaction of the Environmental Protection Authority. The monitoring programme shall be to the satisfaction of the Environmental Protection Authority and shall be prepared prior to commissioning the mine. Results of this monitoring shall be reported through regular reporting mechanisms required under the Agreement Act.
3. At least 12 months prior to the completion of this project the proponent shall prepare and implement a plan for on-going water quality management in the mined-out pit, to the satisfaction of the Environmental Protection Authority.
4. During all project phases, including construction and contract mining as well as on-going mining by the proponent, the proponent shall restrict caravans to a managed caravan park incorporating adequate sewage and other waste disposal facilities.

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5. The proponent shall refer any proposal he may develop to establish a new townsite in the Yandicoogina area to the Environmental Protection Authority for assessment.
6. The proponent shall refer any proposal to increase the mining rate beyond 5 million tonnes per year to the Environmental Protection Authority.


Barry Hodge, MLA
MINISTER FOR ENVIRONMENT

25 MAY 1983

YANDICCOGINA (MARILLANA) IRON ORE PROJECT

ENVIRONMENTAL MANAGEMENT COMMITMENTS

1. The Proponent will submit an environmental monitoring and management programme with the mining proposals to the State in accordance with the State Agreement Act.
2. Regular assessment of monitoring results and management effectiveness are to be reported as part of the monitoring and management programme. Reports will be submitted to the responsible Minister at intervals specified in the Act.
3. The Proponent will comply with the provisions of all relevant Government Acts and Regulations that may apply to the operations.
4. An Environmental Officer will be responsible for all environmental monitoring and management activities for the Project.
5. Environmental awareness programmes will be provided for all construction, contractor and operational workforce.
6. During the construction phase minimum alteration to the existing topography will be achieved. Once construction is complete, areas no longer required will be contoured, slopes stabilised, topsoil replaced and revegetated.
7. Borrow pits, where possible, will be located in areas not visible from the accommodation sites or access roads. The pits will be reshaped and revegetated. Drainage control will be employed to reduce surface water ponding.
8. Erosion will be managed by contouring, stabilising and vegetation.
9. Minimisation of disturbance to archeological sites will be achieved by reducing any operations on the sites. Where a site may need to be disturbed, the Proponent will comply with any conditions imposed by the Minister for Aboriginal Affairs.
10. The area of disturbance will be reduced by using overburden for bund walls, fill for borrow pits and by returning overburden and waste ore to the mined out areas of the pit.
11. Surface dumps of overburden including bund walls, refilled borrow pits and the main overburden dump area will be stabilised to minimise wind and water erosion. The final waste dump will be constructed as to conform with the existing topography.
12. Revegetation of the mine dumps will be achieved using the most successful vegetation techniques available. The revegetation programme will be monitored intensively during the mining phase, and routinely following decommissioning.
13. Mine dewatering will be affected by pumping the minimum amount of groundwater to achieve optimum mining conditions.
14. Mine dewatering discharge will be fed into Marillana Creek and used as irrigation water to support phreatophytic vegetation.

15. No contaminated process water from the operation will be allowed to discharge to the creek system or to the groundwater. A detailed water quality sampling and analysis programme will be adopted as part of the monitoring programme.
16. The removal of waste materials, ie. oils, sewage, etc. will be undertaken in accordance with Health Department and Local Authorities' requirements.
17. Monitoring of the dewatering effects on the riverine phreatophytes will be undertaken. Management will be effected by irrigation of affected areas with mine dewatering discharge.
18. Occupational and ambient dust levels will be managed by controlling dust emissions at their source. Dust monitoring programmes will be implemented, and dust emissions controlled by water spraying.
19. Seasonal vegetation surveys will be undertaken during mining.
20. During construction, caravans will be restricted to a managed caravan park.
21. As part of the general monitoring and management programme, the following mosquito control practices will be adopted:
 - . identify and control potential mosquito breeding sites;
 - . monitor mosquito species to assess disease potential; and
 - . carry out necessary fogging, spraying and baiting should it be required.
22. Management of the area following completion of mining will be undertaken:
 - . Pre-existing drainage networks will be reestablished where applicable.
 - . Revegetation activities will continue until stable communities are established.
 - . The mined out pit will be modified to minimise water quality changes caused by evapoconcentration.

