



Ass # 979

Bull # 809

State # 417

MINISTER FOR THE ENVIRONMENT WESTERN AUSTRALIA

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

**YANDICOOGINA IRON ORE MINE & RAILWAY  
90 KILOMETRES NORTH WEST OF NEWMAN  
HAMERSLEY RANGE (979)**

**HAMERSLEY IRON PTY 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 made in the Consultative Environmental Review and in response to issues raised following public submissions; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

The environmental management commitments were published in Environmental Protection Authority Bulletin 809 (Appendix 4) and a copy 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.
- 2-2 Where, in the course of the detailed implementation referred to in condition 2-1, the proponent seeks to change the designs, specifications, plans or other technical material submitted to the Environmental Protection Authority 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

27/11/1986

### **3 Proponent**

These conditions legally apply to the nominated proponent.

- 3-1 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.

### **4 Environmental Management Programme**

A detailed Environmental Management Programme should contribute to the development of long term management options through comprehensive monitoring and management practices.

- 4-1 Prior to construction, the proponent shall prepare an Environmental Management Programme to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Programme shall detail the procedures and practices for protection of the environment during all phases of mining and include, but not be limited to the following:

- 1 groundwater monitoring and management;
- 2 surface water monitoring and management, including measures for the protection of the integrity of Marillana Creek;
- 3 sheet and gully drainage management along the railway;
- 4 pollution prevention measures, including noise and dust;
- 5 waste management, including overburden, liquid, solid and gaseous wastes;
- 6 protection of flora and fauna, including fire and weed management;
- 7 rehabilitation of disturbed areas; and
- 8 development of a comprehensive monitoring, management and reporting programme for the above.

The reporting programme shall provide for:

- 1 annual reports outlining implementation of the Environmental Management Programme;
- 2 triennial reports reviewing the implementation of the Environmental Management Programme; and
- 3 six yearly reports reviewing the environmental objectives and implementation of the Environmental Management Programme and its effectiveness in achieving those objectives,

to the requirements of the Environmental Protection Authority.

4-2 The proponent shall implement the Environmental Management Programme required by condition 4-1 to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Resources Development.

## **5 Decommissioning**

The satisfactory decommissioning of the project, removal of the plant and installations and rehabilitation of the site and its environs to a sustainable condition in the long term, is the responsibility of the proponent.

5-1 Within five years following commissioning of the Yandicoogina mine, or at such later time considered appropriate by the Minister for the Environment acting on the advice of the Department of Environmental Protection, the proponent shall prepare a plan which:

- 1 describes the process for decommissioning and rehabilitation of the project area;
- 2 provides for the long term management of salinity in the mined-out pit;
- 3 provides for the long term management of any regional effects arising from mining the Channel Iron Deposit;
- 4 has the objective of protecting the water resources and phreatophytic vegetation of the area; and
- 5 provides for the development of a 'walk away' solution for the decommissioned mine, to the requirements of the Environmental Protection Authority on advice of the Department of Minerals and Energy and the Water and Rivers Commission.

Note: A "walk away" solution means that the site shall either no longer require management at the time the proponent ceases mining operations, or if further management is deemed necessary, the proponent shall make adequate provision so that the required management is undertaken with no liability to the State.

5-2 The proponent shall implement the plan required by condition 5-1 to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Resources Development.

## **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.

Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years.

**7 Compliance Auditing**

To help determine environmental performance and compliance with the conditions, periodic reports on the implementation of the proposal are required.


- 7-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

**Procedure**

- 1 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions contained in this statement and for issuing formal clearance of conditions.
- 2 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

**Note**

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

  
Hon Peter Foss QC MLC  
**MINISTER FOR THE ENVIRONMENT**

24 MAY 1996

# **Proponent's Environmental Management Commitments**

**April 1996**

**YANDICOOGINA IRON ORE MINE & RAILWAY  
90 KILOMETRES NORTH WEST OF NEWMAN  
HAMERSLEY RANGE (979)**

**HAMERSLEY IRON PTY LIMITED**

ISSUE	OBJECTIVE	COMMITMENT NUMBER	COMMITMENT	PHASE
Legislation	Comply with relevant legislation.	1	The construction and operation of the project will be undertaken in accordance with the requirements of relevant Commonwealth and State legislation and regulations.	Pre-construction and Post-commissioning.
Amendments to the project	Refer significant project amendments for assessment.	2	Details of any plan to alter the project from that outlined in the CER that is likely to result in significant environmental impacts will be provided to the EPA for environmental assessment.	Pre-construction and Post-commissioning.
Understanding hydrogeological system	Understand hydrogeological systems and develop and evaluate options for long term management.	3	Hammersley will continue to evaluate the impacts of mining and decommissioning on Marillana Creek and the CID jointly with BHPIO for the purposes of further understanding the hydrogeological system in order to develop and evaluate options for viable and compatible long term management strategies.	Pre-construction, Construction and Post-commissioning.
Groundwater monitoring in Marillana Creek	Monitor groundwater in the Marillana Creek alluvium.	5	Results of evaluations will be reported to the Pilbara Iron Ore Environmental Management Committee.	Pre-construction, Construction and Post-commissioning.
		6	Hammersley will establish groundwater monitoring bores in the alluvium to monitor surface and groundwater levels before dewatering commences.	
		7	The results of this monitoring will be submitted to the State on an annual basis.  The monitoring programme will be implemented to the satisfaction of the Minister for the Environment on advice from DEP.	

Hydrogeological data collection	Collect further hydrogeological data to develop a model for the final void.	8	<p>Hamersley will continue to collect necessary hydrogeological data for the development of a model to predict long term water levels and quality in the final void.</p> <p>This model will be applied to assist design the final void to minimize long term impacts of mining on local and regional groundwater resources to the satisfaction of the Minister for the Environment on advice of DEP.</p> <p>A report on this model and the final outcome will be prepared and submitted to the DEP before finalising the decommissioning plan.</p>	Pre-construction, Construction and Post-commissioning.
Environmental Audits	Conduct regular environmental reviews.	11	<p>Hamersley will conduct internal environmental reviews during the construction (every 6 months) and operation (annually) of the project.</p> <p>These environmental reviews will assess compliance with project commitments, relevant Works Approval and Operating Licence conditions and any other environmental requirements.</p>	Pre-construction, Construction and Post-commissioning.
Environmental Reporting	Prepare reports on environmental management and monitoring.	13	<p>Annual and triennial reports that describe the actions taken to comply with environmental management conditions and monitoring commitments will be prepared by Hamersley and issued to the State.</p>	Post-commissioning.

<p>Environmental Management Programme (EMP)</p>	<p>Prepare an EMP for the construction and operation of the project.</p>	<p>14</p>	<p>Hamersley will submit and implement an EMP for the project prior to the commencement of major construction activities. The EMP will be developed in consultation with the DEP, and to the satisfaction of the Minister for the Environment. The EMP will provide details on the following:</p> <ol style="list-style-type: none"> <li>1 groundwater and surface water management during mining and post-mining</li> <li>2 sheet and gully drainage management along the railway</li> <li>3 dust and noise emissions</li> <li>4 waste management</li> <li>5 flora and fauna protection</li> <li>6 fire and weed management</li> <li>7 environmental inductions for construction and operation personnel</li> <li>8 rehabilitation of disturbed areas, and</li> <li>9 monitoring programmes.</li> </ol>	<p>Pre-construction and Post-commissioning.</p>
<p>Biological</p>	<p>Minimise impacts on riverine vegetation.</p>	<p>15</p>	<p>During the project life, Hamersley will undertake monitoring to assess the impacts of dewatering on riverine vegetation.</p>	<p>Pre-construction, Construction and Post-commissioning.</p>
<p>Waste Disposal</p>	<p>Manage wastes in an appropriate manner.</p>	<p>16</p>	<p>If unacceptable impacts are detected, management strategies for the riverine vegetation will be implemented to the satisfaction of the Minister for the Environment on advice from DEP.</p>	<p>Pre-construction, Construction and Post-commissioning.</p>
<p>17</p>	<p>The results of this monitoring and management will be submitted to the State on a triennial basis.</p>	<p>Burning will not be permitted as a means of rubbish or other waste disposal within the project area.</p>	<p>Post-commissioning.</p>	
<p>18</p>	<p>19</p>	<p>All putrescible, biodegradable, inert substances and other general rubbish will be disposed of in a fenced, excavated waste pit that will be regularly backfilled to cover the waste material.</p>	<p>Post-commissioning.</p>	



Sewage Treatment Plants	Ensure sewage treatment plants are approved.	20	Plans for sewage treatment plants proposed at Yandicoogina will be submitted by Hamersley for approval by the Western Australian Department of Health.	Pre-construction.
Hydrocarbons	Appropriate storage of hydrocarbons.	21	All bunding for hydrocarbon storage areas will be constructed in accordance with the requirements of AS 1940 - 1993.	Construction and Post-commissioning.
Contaminated Surface Runoff	Ensure that contaminated surface runoff does not enter natural drainage.	22	Management procedures will be put in place to ensure that stormwater runoff from areas that may result in contamination by hydrocarbons does not enter natural drainage channels without prior treatment.	Post-commissioning.
Dust	Minimise dust.	23	Dust suppression measures, including application of water from tankers, will be implemented to minimise dust generation during site preparation and construction activities.	Construction and Post-commissioning.
Pastoral Activities	Minimise potential disruption to pastoral activities.	24	Hamersley will enter into negotiations with the Marillana pastoral station manager on the issue of means of managing any potential disruptions to pastoral activities.	Pre-construction, Construction and Post-commissioning.
Archaeological and Ethnographic Sites in Railway Corridor	Obtain archaeological and ethnographic clearance for the railway corridor.	25	Once suitable access has been established, Aboriginal people involved in the earlier site survey process with Hamersley will be invited to inspect the route of the surveyed railway alignment to identify any significant archaeological or ethnographic sites.	Pre-construction.
Disturbance to Aboriginal Sites	Comply with <i>Aboriginal Heritage Act</i> .	26	If any Aboriginal site is required to be disturbed, a written application, as required under Section 18 of the <i>Aboriginal Heritage Act</i> , will be made to the Trustees of the Western Australian Museum for consent by the Minister for Aboriginal Affairs.	Pre-construction and Construction.
Rehabilitation	Ensure disturbed areas are rehabilitated.	27	Vegetation and topsoil removed during site preparation will be used to progressively rehabilitate disturbed areas.	Construction and Post-commissioning.

Decommissioning Plan	Prepare plan for decommissioning of the project.	28	<p>A conceptual decommissioning plan will be prepared in consultation with DEP, DOME, and the Water and Rivers Commission to the satisfaction of the Minister for the Environment for subsequent implementation.</p> <p>The plan will be submitted to Government at least two years prior to decommissioning of the project.</p> <p>The plan will address post-mining water management issues giving due consideration to the known results of environmental management at other mines on the channel iron deposit.</p>	Post-commissioning.
		29		
		30		

Attachment to Statement 417 & 523

Change to Description of Proposal

**Proposal:** Yandicoogina Iron Ore Mine & Railway, 90 km north-west of Newman Hamersley Range.

**Proponent:** Hamersley Iron Pty Limited.

**Change:** to the description in the Consultative Environmental Review for Statement for 417 and to Schedule 1 of Statement 523.

**From:**

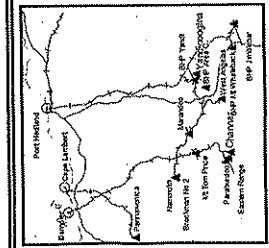
Element	Quantities/Description
Access Road	Unsealed road 27km long linking Great Northern Hwy and western boundary of BHPB's mining lease 70/270

**To:**

Element	Quantities/Description
Access Road	Sealed road with minor deviations, new floodway crossing at Marillana Creek, and other improvements

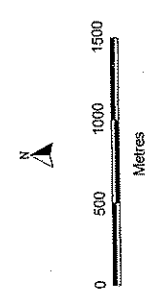
Figure 2. Layout map

Approval Date: 12/05/06



- Flora survey and road upgrade area
- Yandicoogina access road (existing)
- Proposed centreline for access road upgrade
- Potential borrow areas
- Indicative borrow pit locations
- Contractor yard/laydown area (on site of old rail camp)

- Priority flora
- Goodenia omearana (P1)
- Acacia effusa (P2)
- Sida sp. Wittemoor, Abutilon trudgenii (P3)
- ⊙ Goodenia stellata (P4)
- ▲ Acacia aneura var. confiera
- ▨ Flora exclusion zone



<b>Hamersley IRON PTY. LIMITED</b>	
Yandicoogina Iron Ore Mine: Upgrade of Hamersley Section of Mine Access Road	
Author: B. V. Pappas	Date: 7 March 2008
Drawn: Ben Pappas	
Draw No.: Yand_Access U2	
Project No.: CS04-04-1000-2008-00	
<b>Figure 2</b>	