



WESTERN AUSTRALIA  
MINISTER FOR THE ENVIRONMENT

Ass # 653  
Bull # 633  
State # 283

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

**WAGOO HILLS VANADIUM PROJECT & MINGENEW COAL PROJECT (653)**

**PRECIOUS METALS AUSTRALIA 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 Public Environmental Review and subsequently and included in Environmental Protection Authority Bulletin 633 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 substantial, those changes may be effected.

**3 Water Resources**

Development and operation of the Wagoo Hills Vanadium Project should not adversely affect surface and ground water resources on Windimurra Station. If such resources are adversely affected, stock and domestic water supplies of appropriate quality and quantity are to be supplied to Windimurra Station.

- 3-1 Prior to construction at the Wagoo Hills site, the proponent shall prepare water management plans referred to in commitments 5.1 to 5.4 and 6.1 for the Wagoo Hills Vanadium Project, in consultation with the Water Authority of Western Australia, the Department of Agriculture and the Department of Mines, to the requirements of the Environmental Protection Authority.

These plans shall:

1. address surface water flows affected by the project;
2. outline a groundwater monitoring programme to determine whether there has been any contamination arising from the operation of the minesite or process plant and associated tailings dam;

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3. make provision for suitable water supplies for stock and domestic purposes on Windimurra Station if existing supplies are adversely affected by the project; and
  4. specify responsibility for monitoring, auditing of performance and compliance with the plans.
- 3-2 The proponent shall subsequently implement the plans required by condition 3-1.

#### **4 Non-vanadium Dust Levels**

The Wago Hill Vanadium Project and the Mingenew Coal Project should not cause excessive levels of non-vanadium dust.

- 4-1 The proponent shall not cause short term levels of non-vanadium bearing dust at residential premises near the Wago Hill Vanadium Project to exceed 1000 microgrammes per cubic metre ( $\mu\text{g}/\text{m}^3$ ), measured continuously over 15 minutes.
- 4-2 The proponent shall not cause short term levels of non-vanadium bearing dust at residential premises near the Mingenew Coal Project to exceed 1000 microgrammes per cubic metre ( $\mu\text{g}/\text{m}^3$ ), measured continuously over 15 minutes.

#### **5 Noise Limits**

The noise generated by the vanadium mine and process plant at Wago Hill and the coal mine and stockpile area at Mingenew should be kept within environmentally acceptable levels.

- 5-1 The proponent shall ensure that the noise emissions from the Wago Hill Vanadium Project do not cause or contribute to noise levels in excess of:
  - 40 dB(A) between 10.00 pm and 7.00 am;
  - 45 dB(A) between 7.00 pm and 10.00 pm on any day, and between 7.00 am and 7.00 pm on Saturday, Sunday and any gazetted public holiday; and
  - 50 dB(A) between 7.00 am and 7.00 pm Monday to Friday inclusive, but excluding gazetted public holidays;

as measured at the nearest affected noise-sensitive premises.

Where the combined level of the noise emissions from the project and the normal ambient noise exceeds the levels specified above, this condition will be considered to be contravened only when the noise emissions from the site are determined to be dominant and significantly influencing the measured noise levels.

- 5-2 The proponent shall ensure that noise emissions from the Wago Hill Vanadium Project do not include tonal or impulsive components or other characteristics which make the noise more annoying than it would be in their absence.
- 5-3 The proponent shall conduct noise surveys and assessments at the Wago Hill site in consultation with the Environmental Protection Authority.
- 5-4 The proponent shall ensure that the noise emissions from the Mingenew Coal Project do not cause or contribute to noise levels in excess of:
  - 40 dB(A) between 10.00 pm and 7.00 am;
  - 45 dB(A) between 7.00 pm and 10.00 pm on any day, and between 7.00 am and 7.00 pm on Saturday, Sunday and any gazetted public holiday; and

- 50 dB(A) between 7.00 am and 7.00 pm Monday to Friday inclusive, but excluding gazetted public holidays;

as measured at the nearest affected noise-sensitive premises.

Where the combined level of the noise emissions from the project and the normal ambient noise exceeds the levels specified above, this condition will be considered to be contravened only when the noise emissions from the site are determined to be dominant and significantly influencing the measured noise levels.

- 5-5 The proponent shall ensure that noise emissions from the Mingenew Coal Project do not include tonal or impulsive components or other characteristics which make the noise more annoying than it would be in their absence.
- 5-6 The proponent shall conduct noise surveys and assessments at the Mingenew site in consultation with the Environmental Protection Authority.

## **6 Blast Limits**

Blasting operations at the Wagoo Hills Vanadium Project and Mingenew Coal Project should not produce excessive air pressure levels.

- 6-1 The proponent shall ensure that blasting operations at the Wagoo Hills Vanadium Project are undertaken such that:
- the air-blast over-pressure level generated by any blast does not exceed 125 dB (peak linear); and
  - no more than one in any ten consecutive blasts results in an air-blast over-pressure level greater than 120 dB (peak linear);

as measured at the nearest affected noise-sensitive premises.

- 6-2 The proponent shall ensure that blasting operations at the Wagoo Hills Vanadium Project only occur between the hours of 9.00 am and 5.00 pm Monday to Saturday inclusive.
- 6-3 The proponent shall ensure that blasting operations at the Mingenew Coal Project are undertaken such that:
- the air-blast over-pressure level generated by any blast does not exceed 125 dB (peak linear); and
  - no more than one in any ten consecutive blasts results in an air-blast over-pressure level greater than 120 dB (peak linear);

as measured at the nearest affected noise-sensitive premises.

- 6-4 The proponent shall ensure that blasting operations at the Mingenew Coal Project only occur between the hours of 9.00 am and 5.00 pm Monday to Saturday inclusive.

## **7 Decommissioning**

The satisfactory decommissioning of the Wagoo Hills Vanadium Project and the Mingenew Coal Project, the removal of the plants and installations and the rehabilitation of the sites and their environs is the responsibility of the proponent.

- 7-1 At least six months prior to the decommissioning of each project, the proponent shall prepare a decommissioning and rehabilitation plan.
- 7-2 The proponent shall implement the plans required by condition 7-1.

## **8 Proponent**

These conditions legally apply to the nominated proponent.

8-1 No transfer of ownership, control or management of the proposal 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 proposal in accordance with the conditions and procedures set out in the statement.

**9 Time Limit on Approval**

The environmental approval for the proposal is limited.

9-1 If the proponent has not substantially commenced each 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 projects have 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).

**10 Compliance Auditing**

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

10-1 The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of each 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.

Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT

16 SEP 1992

**Public Environmental Review  
Wagoo Hills Vanadium Project  
and  
Mingenew Coal Project  
January 1992**

**PROPONENT'S COMMITMENTS  
(Consolidated from the PER and Responses)**

**APRIL 1992**

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The Proponent undertakes to fulfil the following commitments in accordance with the applicable State laws and regulations and with the standards and procedures agreed with the State.

1. **Vegetation Clearing**
  - 1.1 Minimise clearing of land consistent with safe and efficient operations.
2. **Weeds**
  - 2.1 Develop a management strategy to minimise the spread of Saffron Thistle. This strategy will be developed in consultation with the Department of Agriculture.
3. **Fire**
  - 3.1 Maintain strict fire control procedures.
4. **Rehabilitation**
  - 4.1 Design and rehabilitate all waste dumps in consultation with the Department of Mines and in accordance with the "Guidelines for Waste Dump Design and Rehabilitation" of that Department.
  - 4.2 Rehabilitate the surrounds of the vanadium mine site and the process plant and village areas at Windimurra following decommissioning of the project.
  - 4.3 Prepare specific proposals for site decommissioning in the event of termination of the project and implement those proposals after review and approval of the relevant Government Agencies at the time.
5. **Groundwater**
  - 5.1 Design and implement a monitoring programme of groundwater levels and water quality in the borefield and other bores in the vicinity of the project area at Windimurra before operational start and to the satisfaction of the Water Authority of WA.

- 5.2 Undertake to guarantee continuity of stock water if changes in groundwater levels, caused by the Project, adversely affect pastoral activities.
- 5.3 Guarantee to provide the Pastoral Lessee with a potable water supply if the project adversely affects his current source of fresh water.
- 5.4 Design the tailings dams in consultation with the Department of Mines and in accordance with the "Guidelines for the Preparation of the New Tailings Dams" of that Department.
- 5.5 Implement measures in the process plant to conserve water.
- 6. **Surface Water**
  - 6.1 Prepare drainage management plans for the vanadium mine and process plant at Windimurra in consultation with the Department of Mines.
- 7. **Dust**
  - 7.1 Ensure that vanadium dust is controlled to below limits established in the Mines Regulations Act 1946 and Regulations, by incorporating dust extraction and collection equipment in the process plant.
  - 7.2 Develop an effective operator training and awareness program to ensure that the process plant is well operated and any potential occupational health problems are quickly identified and are rectified immediately.
- 8. **Emissions**
  - 8.1 Submit final design details of exhaust stacks and exhaust cleaning devices prior to construction for approval by the EPA as part of the Environmental Management Programme.

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- 8.2 Submit a detailed composition of the coal to the EPA and Department of Mines to assist in designed management plans.

**9. Transport/Packaging/Storage**

- 9.1 Develop a transportation management and contingency plan to ensure that the transportation of hazardous materials is undertaken safely. A driver training program will be incorporated into the plan and will include regular review of driver awareness. Similarly, the integrity of transportation equipment will be monitored on a regular basis.

The transportation management and contingency plan will be developed in consultation with the Explosives and Dangerous Goods Division of the Department of Mines and the Western Australian Hazardous Materials Emergency Management Scheme (WAHMEMS).

- 9.2 Submit a final design of the storage facility for the sodium salt reagent at Windimurra to the Department of Mines and the EPA for approval as part of the Environmental Management Program prior to the construction of the process plant.
- 9.3 Ensure that all handling, packaging and road transport of inputs to the process plant and products from that plant comply with the requirements of the Australian Code for the Transport of Dangerous Goods by Road and Rail and the Dangerous Goods (Road Transport) Regulations 1983 and amended Regulations 1988.

**10. Workforce**

- 10.1 Prohibit domestic pets in the project area as a condition of employment.
- 10.2 Restrict off-road driving and prohibit hunting by employees as a condition of employment.



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The Proponent undertakes to fulfil the following commitments in accordance with the applicable State laws and regulations and with the standards and procedures agreed with the State.

**1. Weeds**

- 1.1 Develop a management strategy to minimise the spread of Saffron Thistle. This strategy will be developed in consultation with the Department of Agriculture.

**2. Rehabilitation**

- 2.1 Backfill the coal quarry with overburden material, replace topsoil, and restore the site to its current use for grain production or natural vegetation.

**3. Land Use**

- 3.1 Manage surplus farm land areas in accordance with competent farm management techniques.

**4. Groundwater**

- 4.1 Design and implement a monitoring programme for abnormal contaminated coal mine water seeping from the pit and holding pond.

**5. Surface Water**

- 5.1 Prepare drainage management plans for the coal quarry at Mingenew in consultation with the Department of Mines.

**6. Noise**

- 6.1 Liaise with residents living in the vicinity of the coal quarry to ensure that blasting operations there do not cause a disturbance and modify those blasting operations if necessary.

**7. Dust**

- 7.1 Control coal dust and total dust and noise levels in the project areas in accordance with the applicable acts and regulations.**