



MINISTER FOR THE ENVIRONMENT;  
EMPLOYMENT AND TRAINING

Statement No.

000472

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

**Title:** WAGOO HILLS VANADIUM PROJECT AND MINGENEW  
COAL PROJECT

**Proposal:** The development of a vanadium mining and processing operation  
80 km south-east of Mt Magnet, and a coal mine near Mingenew to  
provide a source of energy to the vanadium operation.

**Proponent:** Precious Metals Australia Limited

**Proponent Address:** Level 3, 18 Richardson Street , WEST PERTH WA 6005

**Assessment Number:** 1146

**Previous Assessment Number:** 653

**Previous Statement Number:** Statement No. 283 published on 17 September 1992

**Report of the Environmental Protection Authority:** Bulletin 878

**Previous Report of the Environmental Protection Authority:** Bulletin 633

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is now subject to the following conditions and procedures which replace all previous conditions and procedures:

**1 Proponent Commitments**

1-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 1 of this statement, provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

In the event of any inconsistency, the conditions and procedures shall prevail to the extent of the inconsistency.

1-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in this statement.

Published on

- 2 APR 1998

## **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.

## **3 Environmental Management System**

- 3-1 In order to manage the environmental impacts of the project, and to fulfil the requirements of the conditions and procedures in this statement, prior to the start of mining at either Windimurra (Wagoo Hills) and/or Mingenew, the proponent shall prepare Environmental Management System documentation with components such as those adopted in Australian Standards AS/NZS ISO 14000 series, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.
- 3-2 The proponent shall implement the Environmental Management System referred to in condition 3-1.

## **4 Environmental Management Plans**

- 4-1 Prior to commencement of ground-disturbing activities, the proponent shall prepare Environmental Management Plans to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, and the Water and Rivers Commission.

These Plans shall address:

### Vanadium mine (at Windimurra)

- 1 control of vanadium dust;
- 2 effect of the proposal on natural drainage;
- 3 control of noise generated within the mine and plant area;
- 4 impact of the process water supply borefield (refer to condition 5); and
- 5 transportation of process materials;

### Coal mine (at Mingenew)

- 6 rehabilitation of the open-cut pit;
  - 7 effect of mining on the groundwater;
  - 8 effects of blasting on neighbouring properties; and
  - 9 control of dust and noise from the crushing plant.
- 4-2 The proponent shall implement the Environmental Management Plans required by condition 4-1.
  - 4-3 The proponent shall make the Environmental Management Plans required by condition 4-1 publicly available, to the requirements of the Environmental Protection Authority.

## **5 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.

- 5-1 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, to the requirements of the Environmental Protection Authority on advice of the Water and Rivers Commission, Agriculture Western Australia, and the Department of Minerals and Energy.

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;
  - 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.
- 5-2 The proponent shall implement the Water Management Plans required by condition 5-1.
- 5-3 The proponent shall make the Water Management Plans required by condition 5-1 publicly available, to the requirements of the Environmental Protection Authority.

## **6 Non-Vanadium Dust Levels**

The Wagoo Hills Vanadium Project and the Mingenew Coal Project should not cause excessive levels of "non-vanadium dust".

- 6-1 The proponent shall not cause short term levels of non-vanadium bearing dust at residential premises near the Wagoo Hills Vanadium Project to exceed 1000 micrograms per cubic metre ( $\text{ug}/\text{m}^3$ ), measured continuously over 15 minutes.
- 6-2 The proponent shall not cause short term levels of non-vanadium bearing dust at residential premises near the Mingenew Coal Project to exceed 1000 micrograms per cubic metre ( $\text{ug}/\text{m}^3$ ), measured continuously over 15 minutes.

Note: The 1000  $\text{ug}/\text{m}^3$  limit referred to in conditions 6-1 and 6-2 is to be considered a minimum standard to be met by the proposal. It should be understood that the project may be subject to more stringent dust limits set by the Department of Environmental Protection through Works Approvals and/or Licence conditions.

## **7 Greenhouse Gas Emissions**

- 7-1 Prior to commissioning, the proponent shall prepare a Greenhouse Gas Emissions Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Plan shall include:

- 1 calculation of the "greenhouse gas" emissions (using methodology developed for Australia);
  - 2 measures to limit "greenhouse gas" emissions; and
  - 3 estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with the efficiencies of other comparable projects producing a similar product.
- 7-2 The proponent shall implement the Greenhouse Gas Emissions Management Plan required by condition 7-1.
- 7-3 The proponent shall make the Greenhouse Gas Emissions Management Plan required by condition 7-1 publicly available, to the requirements of the Environmental Protection Authority.

Note: The proponent should consider entry (whether on a project-specific basis, company-wide arrangement or within an industrial grouping, as appropriate) into the Commonwealth Government's "Greenhouse Challenge" voluntary co-operative agreement program.

Components of the agreement program include:

- 1 an inventory of emissions;
- 2 opportunities for abating "greenhouse gas" emissions in the organisation;
- 3 a "greenhouse gas" mitigation action plan;
- 4 regular monitoring and reporting of performance; and
- 5 independent performance verification.

## **8 Noise Limits**

The proponent should conduct operations so that noise emissions do not unreasonably impact on people in the vicinity of the Wagoo Hills Vanadium Project and the Mingenew Coal Project.

- 8-1 The proponent shall ensure that noise emissions meet the requirements of the noise control regulations applying from time to time under the Environmental Protection Act.
- 8-2 The proponent shall conduct noise surveys (including baseline measurements) and assessments (including the impact of tonal noise) at the Wagoo Hills site and the Mingenew site in consultation with the Department of Environmental Protection.

## **9 Blast Limits**

The proponent should conduct operations so that blasting does not unreasonably impact on people in the vicinity of the Wagoo Hills Vanadium Project and the Mingenew Coal Project.

- 9-1 The proponent shall ensure that blasting operations meet the requirements of the noise control regulations applying from time to time under the Environmental Protection Act.

## **10 Decommissioning**

10-1 At least six months prior to decommissioning, the proponent shall prepare a Decommissioning Management Plan to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This Plan shall address:

- 1 removal or, if appropriate, disposal on-site of plant and infrastructure;
- 2 rehabilitation of all disturbed areas to agreed final land use(s); and
- 3 identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.

10-2 The proponent shall implement the Decommissioning Management Plan required by condition 10-1.

10-3 The proponent shall make the Decommissioning Management Plan required by condition 10-1 publicly available, to the requirements of the Environmental Protection Authority.

## **11 Performance Review**

11-1 Each six years following the commencement of construction, the proponent shall submit a Performance Review to evaluate the environmental performance relevant to:

- 1 environmental objectives reported on in Environmental Protection Authority Bulletins 633 and 878;
- 2 proponent's consolidated environmental management commitments documented in schedule 1 of this statement and those arising from the fulfilment of conditions and procedures in this statement;
- 3 Environmental Management System environmental management targets;
- 4 Environmental Management Plans; and
- 5 environmental performance indicators;

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

Note: The Environmental Protection Authority may recommend changes and actions to the Minister for the Environment following consideration of the Performance Review.

## **12 Proponent**

12-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.

12-2 Any request for the exercise of that power of the Minister referred to in condition 12-1 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.

- 12-3 The proponent shall notify the Minister for the Environment of any change of proponent contact name and address within 30 days of such change.

### **13 Commencement**

- 13-1 The proponent shall provide evidence to the Minister for the Environment within two years of the date of this statement that the proposal has been substantially commenced.

- 13-2 Where the proposal has not been substantially commenced within two years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.

- 13-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond two years from the date of this statement.

- 13-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding two years for the substantial commencement of the proposal.

### **14 Compliance Auditing**

- 14-1 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.

- 14-2 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.

- 14-3 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

#### **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.

  
CHERYL EDWARDES (Mrs) MLA  
MINISTER FOR THE ENVIRONMENT

31 MAR 1998

**Schedule 1**

**Proponent's Consolidated Environmental Management  
Commitments**

April 1992

**WAGOO HILLS VANADIUM PROJECT &  
MINGENEW COAL PROJECT (653/1146)**

Precious Metals Australia Limited

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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.

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 Mingenev 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.