



## MINISTER FOR ENVIRONMENT

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

COOLJARLOO MINERAL SANDS PROJECT  
(Excluding the Proposed Dry Processing Plant at Muchea)

TiO<sub>2</sub> CORPORATION NL

This proposal may be implemented subject to the following conditions:

1. The proponent shall adhere to the proposal (excluding the dry processing plant at Muchea) as assessed by the Environmental Protection Authority and shall fulfil the commitments made in the Environmental Review and Management Programme with the exception of those commitments relating to the proposed dry processing plant (copy of commitments attached).
2. Prior to commencement of mining, the proponent shall undertake a detailed dieback survey, to the satisfaction of the Environmental Protection Authority following advice from the Department of Conservation and Land Management, in the proposed mining areas, in order to identify any occurrences of Phytophthora spp. within these areas.
3. The proponent shall restrict mining and related activities to areas that are proven to be uninfected by Phytophthora pathogens as a result of the survey required in condition 2, until detailed dieback isolation and treatment programmes are developed to the satisfaction of the Environmental Protection Authority following advice from the Department of Conservation and Land Management.
4. The proponent shall fund research programmes with the objectives of developing:
  - (i) an understanding of the epidemiology of Phytophthora spp. pathogens on northern sandplain vegetation types, and effective disease management and control strategies; and

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## 4. (cont'd)

- (ii) cost-efficient methods of sterilization treatment of localised disease infections in the field and in industrial process water bodies where appropriate.

The results of the research programmes shall be forwarded to the Environmental Protection Authority and the Department of Conservation and Land Management.

- 5. The proponent shall not undertake productive mining activities in the area subject to the Environmental Protection Authority's 'Red Book' Recommendations for Badgingarra National Park (5.22) until:
  - (i) a review of the recommendations for this area has been carried out by the task force established for this purpose in accordance with Government initiatives relating to mining in national parks and nature conservation reserves;
  - (ii) implementation of the resulting recommendation has been fully approved by Government, and
  - (iii) access has been approved through either the revised recommendation or procedures outlined in the Government's policy for mining in national parks and nature conservation reserves.
- 6. Prior to the commencement of mining activities, the proponent shall develop and implement, to the satisfaction of the Water Authority of Western Australia, a groundwater and surface water monitoring programme, including regular reporting of monitoring results, with the objective of conserving and minimising impact on water resources.
- 7. Prior to the commencement of productive mining, the proponent shall prepare and implement an environmental management programme relating to all aspects of environmental monitoring and management requirements for mining operations described in the ERMP, to the satisfaction of the Department of Mines and the Environmental Protection Authority.
- 8. The proponent shall submit brief annual and comprehensive triennial reports to the Department of Mines (and hence to the Environmental Protection Authority) discussing various aspects of the Environmental Management Programme and monitoring of the project, including rehabilitation programmes and other aspects detailed in the Environmental Management Programme. The Environmental Protection Authority will advise the Department of Mines as to the acceptability of these reports and the programme performance.
- 9. Prior to an application for extension of mining activities beyond those described in the Environmental Review and Management Programme, the proponent shall refer the proposed extension to the Environmental Protection Authority for its assessment.

Procedures

The following procedures shall be followed with respect to the implementation of the above conditions.

Where the proponent is required to report on monitoring results, or to undertake action to the specification of the Department of Mines and the Environmental Protection Authority, the proponent need only provide advice to or seek approvals from the Department of Mines. That Department shall then refer the advice or request to the Environmental Protection Authority and shall ensure that its requirements are incorporated into approvals or requirements issued to the proponent by the Department of Mines.

Barry Hodge, MIA  
MINISTER FOR ENVIRONMENT

- 3 OCT 1988

ENVIRONMENTAL MANAGEMENT COMMITMENTS  
FOR THE PROPOSED COOLJARLOO MINERAL SANDS PROJECT  
(EXCLUDING THE DRY PROCESSING PLANT)

TiO<sub>2</sub> Corporation NL will undertake the following commitments with respect to the Cooljarloo Mineral Sands Project:

1. TiO<sub>2</sub> Corporation NL is committed to achieve a very high standard of mine-site rehabilitation and in particular to:
  - . carry out detailed soil profile analyses, and flora and vegetation studies in front of the mine path to provide site specific information for rehabilitation planning;
  - . supplement rehabilitation measures by seeding and planting using local indigenous species;
  - . consult closely with Government agencies and especially the Rehabilitation Section of the Department of Mines;
  - . establish long-term monitoring studies to assess revegetation and recolonisation by fauna; and
  - . encourage independent research programmes into rehabilitation methods.
2. TiO<sub>2</sub> Corporation NL will develop, in consultation with the Department of Conservation and Land Management and the Central West Coast Fire Protection Committee, a comprehensive fire management plan for the Cooljarloo tenements. This will have the objectives of providing protection to rehabilitation and of encouraging ecological diversity and vigour generally. A fully equipped fire truck and trained personnel will be maintained on site for this purpose.
3. A commitment is also made to maintain groundwater levels at Cooljarloo within naturally occurring seasonal levels so as to reduce risks of adverse impact on vegetation due to drawdown. Should monitoring detect indications of drawdown, the proponents will take action to restore groundwater levels. Surface hydrological features will also be maintained by the reconstruction of Mullering Brook after mining and by incorporating wet depressions in the rehabilitation in appropriate places.
4. Install water table monitoring bores at the Cooljarloo site. Results of drilling, tests and monitoring will be submitted to the EPA and Water Authority.
5. TiO<sub>2</sub> Corporation NL will assess changes in vegetation in the vicinity of the minesite with respect to variations in the water table.
6. As monazite is radioactive, strict adherence to all Western Australian regulations and the Commonwealth Code of Practice relating to radiation protection will be adopted as described in Section 7.4. This will include specifically:
  - . a comprehensive radiation level monitoring programme at the minesite and environs and of monazite transport units;

- . comprehensive dust suppression measures; and
  - . specific precautions in the handling, storage and transport of monazite product.
7. TiO<sub>2</sub> Corporation NL is committed to a high level of environmental management and monitoring as an integral part of the Cooljarloo project. It intends to conduct its operations with the highest level of corporate social responsibility and is firmly committed to the principle that mining should involve a transient impact on the environment.
  8. Liaise with the Department of Conservation and Land Management on matters relating to the prevention of dieback spread.
  9. Conduct a survey of dieback infested areas occurring within the mining tenements.
  10. Develop and implement, as part of a staff education programme, precautions to avoid the spread of dieback.
  11. Commission a study to determine a cost effective mechanism of sterilising spots of dieback infection and apply the resulting procedures to treat dieback infections in the mining path and others which may affect the mining operation.
  12. Material sources, especially sand and gravel sources, will be checked for dieback infection prior to any cartage to the Cooljarloo site. Infected sources will be rejected.
  13. The Company will routinely monitor industrial waters for dieback infection and will develop a contingency plan in association with the Department of Conservation and Land Management to prevent the spread of dieback if there is an infection and to return the waters to a dieback free condition in line with their recommended solution.
  14. TiO<sub>2</sub> Corporation NL will install an access road at Cooljarloo along which all vehicles entering the tenement on lawful business will be required to travel. This will have a dieback control facility through which all vehicles will be required to pass. Earthmoving equipment entering or re-entering the site will be subject to stringent cleaning for dieback control. TiO<sub>2</sub> cannot be responsible for non-company vehicles entering the tenement areas from other directions. But, in liaison with the Government, TiO<sub>2</sub> will discuss the possibility of closing off all other tracks which enter the tenement area.
  15. A disease free nursery, using local sources of seed, will be established near Cooljarloo to provide plants for rehabilitation.
  16. TiO<sub>2</sub> Corporation NL will be undertaking and promoting research into the propagation and establishment of those native species which grow on the tenement. TiO<sub>2</sub> Corporation NL will report its mining and rehabilitation plans, and the results of its rehabilitation research to the State Mining Engineer on an annual and triennial basis as requested.

17. TiO<sub>2</sub> Corporation NL recognises the operations areas which are subject to regulation under the Radiation Safety Act, and will abide by the requirements of the Act or any amendments made to that Act.
18. TiO<sub>2</sub> Corporation NL has undertaken to abide by the Commonwealth Code of Practice. Referring to the Radiation Safety Officer, that Code requires that person to have "qualifications and experience acceptable to the appropriate authority". (Clause 9(19))
19. Wastes containing radioactive residues will be disposed of to standards approved by the appropriate authority.
20. Recognising that the inhalation of radioactivity as airborne dust presents the most severe operating restriction in terms of occupational and public health considerations, TiO<sub>2</sub> Corporation NL to maintain compliance with statutory requirements will wash concentrates free of dust material prior to transport.