



WESTERN AUSTRALIA

## MINISTER FOR THE ENVIRONMENT

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

WASTEWATER TREATMENT &amp; DISPOSAL, ALBANY (654)

WATER AUTHORITY OF WESTERN AUSTRALIA

This proposal may be implemented subject to the following conditions:

**1 Proponent Commitments**

The proponent has made a number of environmental management commitments 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 included as Appendix 1 in Environmental Protection Authority Bulletin 638 (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 Land-based Wastewater Disposal**

The final stage of wastewater treatment will be by slow-rate infiltration of secondary treated wastewater onto woodlots. Stringent standards have been placed on this treatment process and the formulation of contingency plans is required (see condition 5).

- 3-1 Within two years of commissioning the land disposal site, the proponent shall commence trial plantings on the land disposal site to ascertain the merits and disadvantages of alternative tree species and provenances.
- 3-2 The proponent shall maintain an unharvested 50 metre visual buffer along the southern periphery (Gunn Road border) of the land disposal site. This buffer shall consist of a combination of plantation and ornamental native species.
- 3-3 The proponent shall not irrigate remnant native vegetation on the land disposal site with wastewater.
- 3-4 The proponent shall design and manage the rising main leading into the holding pond such that the outlet is submerged at all times.

Published On

- 7 OCT 1992

3-5 Commencing at the time of commissioning the land disposal site, the proponent shall measure soil infiltration rates on a triennial basis and shall ensure that appropriate soil water storage capacities are maintained.

3-6 If the values measured according to the requirements of condition 3-5 are sufficiently low as to threaten the retention of contaminants on the site, the proponent shall implement approved contingency measures (see conditions 5 and 6-4).

#### **4 Timewell Road (No. 2) Treatment Plant**

The Timewell Road plant is the main wastewater treatment plant for Albany and is currently licensed. The site has been established for some time with future expansion in mind. Ultimately this plant will receive the domestic wastewater streams from the No. 1, No. 3 and No. 4 treatment plants. The Timewell Road treatment plant is the source of effluent that will be irrigated at the land-based wastewater disposal site.

4-1 The proponent shall retain remnant native vegetation at the Timewell Road (No. 2) treatment plant site where practicable.

#### **5 Contingency Measures**

Contingency measures should be prepared by the proponent in the unlikely event that the land-based wastewater disposal site does not perform to the required level.

5-1 The proponent shall not irrigate Reserve 20948 (vested in the National Parks and Nature Conservation Authority) with wastewater.

5-2 Within 12 months of the date of this statement, the proponent shall prepare an alternative plan for the temporary irrigation of treated wastewater in the event that insect attack, fire or a decline in soil infiltration threaten to cause either:

- nutrient losses from the site to exceed 3 tonne of nitrogen and 1 tonne of phosphorus per year; or
- surface runoff from the site to occur more frequently than 1 year in 10 (based on long term rainfall probabilities).

5-3 The proponent shall implement the plan referred to in condition 5-2 when required by the Environmental Protection Authority.

#### **6 Monitoring and Reporting**

Monitoring is to be conducted by the proponent in order to assess the environmental impacts of the project and to provide feedback for future management. On-going monitoring and reporting requirements will be reviewed by the Environmental Protection Authority after submission of the third triennial report.

6-1 The proponent shall submit to the Environmental Protection Authority brief annual and more detailed triennial reports addressing, but not limited to the following:

- 1 a water balance for the land disposal site, including a comparison between measured and estimated (modelled) evapotranspiration for both rainfed and irrigated woodlots;
- 2 results of environmental monitoring;
- 3 results of infiltration rate measurements, trends and implications for the onsite retention of water and contaminants (see condition 3-6);
- 4 results of trial plantings of alternative species (see condition 3-1);
- 5 compliance with the commitments; and
- 6 any proposed changes to management or monitoring of aspects of the system.

6-2 Within three years of commissioning the land disposal site, the proponent shall commence submitting the reports required by condition 6-1 to the Environmental Protection Authority and shall make them publicly available.

6-3 The proponent shall report any breach or anticipated breach of the environmental commitments to the Environmental Protection Authority immediately.

6-4 If impacts are detected which are deemed to be unacceptable by the Environmental Protection Authority, the proponent shall modify and remedy the operations of the treatment plants and/or the land disposal site.

## **7 Decommissioning**

The proponent is responsible for decommissioning and removal of treatment and disposal installations and rehabilitating the site and its environs (including de-stumping).

7-1 At least six months prior to decommissioning the land disposal site or any of the treatment plants (Numbers 1, 2, 3 or 4), the proponent shall prepare a decommissioning and rehabilitation plan.

7-2 The proponent shall implement the decommissioning and rehabilitation plan 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 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.

## **9 Time Limit on Approval**

The environmental approval for the proposal is limited.

9-1 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 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 this 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.

Note: The proponent will be required to apply for a Works Approval and Licence for the land disposal site under the provisions of Part V of the Environmental Protection Act.

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Bob Pearce, MLA  
MINISTER FOR THE ENVIRONMENT

6 OCT 1992

**PROPONENT'S COMMITMENTS**

**WASTEWATER TREATMENT &  
DISPOSAL**

**ALBANY (654)**

**WATER AUTHORITY OF WESTERN  
AUSTRALIA**

The proponent has made the following environmental commitments:

## **SUMMARY OF COMMITMENTS**

### **9.1 WASTEWATER DISCHARGES**

#### **9.1.1 NO. 1 (KING POINT) TREATMENT PLANT**

Discharge from the No. 1 treatment plant would cease in December 1994.

#### **9.1.2 NO. 2 (TIMEWELL ROAD) TREATMENT PLANT**

Discharge from the No. 2 treatment plant into Five Mile Creek would cease in December 1996.

#### **9.1.3 LAND TREATMENT SITE**

The nutrient discharge from the land treatment site in groundwater or surface water would not exceed 1 t of phosphorus and 3 t of total nitrogen per annum.

### **9.2 NO. 2 TREATMENT PLANT**

The existing No. 2 aerated pond treatment plant would be upgraded to a capacity of 3,500 kL/d by December 1994.

The treatment facilities would be further upgraded, enlarged or replaced as necessary to meet further demand, depending on their performance and that of the land treatment system.

From December 1994, the volume of wastewater pumped daily to the land treatment site would not be less than the volume of water diverted from the No. 1 treatment plant. The volume pumped would be gradually increased as the trees grew on the land treatment site, until discharge into Five Mile Creek ceased in December 1996.

The aerated pond plant and any subsequent upgraded or new plant would be managed and operated in such a manner that:

- noise levels from the plant complied with the noise limits likely to be set by the EPA;

- offensive odours would only be detectable at the nearest odour-sensitive premises on rare occasions;
- the wastewater from the plant did not create odour problems on the land treatment site.

Appropriate remedial action would be taken if noise or odour reached unacceptable levels.

Sludge from the plant would be disposed of in accordance with the proposed Australian Water Resources Council *Draft guidelines for sewerage systems—Sludge management* or by a method approved by the Health Department of Western Australia.

Earthworks for the new aerated pond and storage pond would be carried out in a manner that minimized increased sediment flow into Five Mile Creek.

## 9.3 LAND TREATMENT SYSTEM

### 9.3.1 CONSTRUCTION

#### *Establishment of woodlot*

Establishment of the woodlot would be carried out in an environmentally responsible manner.

In particular, shatter ploughing and mounding would avoid developed watercourses and would be managed to minimize increased sediment flow into Seven Mile Creek. Fifteen metre wide buffer zones would be maintained on each side of the creek.

The spraying of herbicide for pre-emergent and post-emergent weed control would be closely managed to avoid pollution of Seven Mile Creek or overspray on to adjoining properties.

#### *Earthworks*

Earthworks for the construction of the storage dam and tracks and roads on the property would take place during the summer. The drainage discharge from disturbed areas would be diverted on to areas of established pasture to minimize increased sediment flow into Seven Mile Creek to the satisfaction of the EPA.

The generation of dust would be suppressed by the use of water tankers.

### 9.3.2 OPERATION

The land treatment system would be managed and operated in accordance with the National Health and Medical Research Council and Australian Water Resources Council guidelines (1987) for land treatment of wastewater, or as otherwise approved by the Health Department of Western Australia.

### *Overland flow area*

The overland flow area would be operated to remove the nitrogen content in the incoming wastewater to a level that resulted in not more than 106 kg/ha of total nitrogen per annum being applied to the area of trees irrigated.

### *Storage dam*

The storage of wastewater in the dam would be managed so that no overflow of the dam occurred in 90% of years.

### *Irrigation system*

The operation of the irrigation system would be managed in a manner that:

- achieved no runoff in 90% of years;
- achieved moisture levels in the effective root zone of the trees sufficient to limit downward percolation to the amount required to ensure root zone salinity was maintained at a sustainable level;
- optimized evapotranspiration by the trees.

### *Monitoring*

The performance of the system would be monitored in accordance with the programme set out in Appendix D.

### *Insect attack*

The Water Authority would join with CALM and other landholders with tree plantations in the Albany area to monitor insect activity in order to provide early warning of insect build-up.

If serious insect attack appeared likely, the Water Authority, in conjunction with CALM, would develop and implement a plan to control the attack.

### *Fire*

The Water Authority would:

- maintain firebreaks on the site to the satisfaction of the Bush Fires Board;
- keep all fire dams on the site full of water during summer,
- provide and maintain fire control vehicles on the site to the satisfaction of the Bush Fires Board;



- ensure that Water Authority employees were trained to handle fire incidents;
- ensure that staff complied with the provisions of the *Bush Fires Act 1954*;
- prohibit smoking in the areas planted with trees.

### 9.3.3 CONTINGENCY PLANNING

If the land treatment system failed to perform to design, the Water Authority would, as necessary:

- expand the overland flow and irrigated tree areas
- construct an additional storage dam.