



MINISTER FOR THE ENVIRONMENT; LABOUR RELATIONS

000513

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

CONSTRUCTION OF ADDITIONAL CRYSTALLIZERS USELESS LOOP, SHARK BAY

Proposal:

To construct a new series (F series) of crystallizer ponds at the northern edge of the existing Shark Bay Salt crystallizers in Useless Loop, Shark Bay, as documented in schedule 1 of this statement. Construction of the new series of ponds will enclose approximately 125 hectares of shallow marine environment up to the boundary of Mining Lease 260 SA, of which some 60 hectares is seagrass.

Proponent:

Shark Bay Salt Joint Venture

Proponent Address:

22 Mount Street, PERTH WA 6000.

Assessment Number: 1193

Report of the Environmental Protection Authority: Bulletin 934

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following conditions and procedures:

1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

2 Proponent Commitments

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

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 construction of the additional crystallizers, the proponent shall demonstrate to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection that there is in place an environmental management system which includes the following elements:
 - 1 An environmental policy and corporate commitment to it;
 - 2 Mechanisms and processes to ensure:
 - (1) planning to meet environmental requirements;
 - (2) implementation and operation of actions to meet environmental requirements;
 - (3) measurement and evaluation of environmental performance; and
 - 3 Review and improvement of environmental outcomes.
- 3-2 The proponent shall implement the environmental management system required by condition 3-1.

4 Ballast Water Management Plan

4-1 Within 12 months following the formal authority issued to the decision-making authorities under Section 45(7) of the Environmental Protection Act 1986, the proponent shall prepare a Ballast Water Management Plan which details how Australian Quarantine and Inspection Service guidelines will be enforced and what additional measures will be adopted to minimise the risk of introduction of exotic species from ballast water.

This plan shall be prepared to the requirements of the Environmental Protection Authority on advice of the Australian Quarantine and Inspection Service and the Department of Environmental Protection.

4-2 The proponent shall implement the Ballast Water Management Plan required by condition 4-1.

5 Seagrass Research Strategy

- 5-1 The proponent shall prepare a Seagrass Research Strategy which outlines reasonable and practical research into the rehabilitation of seagrass to be facilitated by the proponent. The strategy shall be prepared to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.
- 5-2 The proponent shall implement the Seagrass Research Strategy required by condition 5-1.

- 5-3 Based on the research outlined in the Seagrass Research Strategy, the proponent shall develop a reasonable and practical plan for rehabilitation trials in areas previously affected by the salt works. The plan shall be prepared to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.
- 5-4 The proponent shall implement the plan required by condition 5-3.

6 Decommissioning and Rehabilitation Management Plan

- 6-1 At least six months prior to decommissioning, the proponent shall prepare a Decommissioning and Rehabilitation Management Plan to ensure that the area is rehabilitated to agreed standards, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Department of Conservation and Land Management and Fisheries WA.
- 6-2 The proponent shall implement the Decommissioning and Rehabilitation Management Plan required by condition 6-1 until such time as the Minister for the Environment determines that decommissioning and rehabilitation are complete.
- 6-3 The proponent shall make the Decommissioning and Rehabilitation Management Plan required by condition 6-1 publicly available, to the requirements of the Environmental Protection Authority.

7 Proponent

- 7-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 1986 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.
- 7-2 Any request for the exercise of that power of the Minister referred to in condition 7-1 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.
- 7-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

8 Commencement

- 8-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced.
- Where the proposal has not been substantially commenced within five 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.
- 8-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 8-1 and 8-2.

8-4 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 five years for the substantial commencement of the proposal.

9 Compliance Auditing

- 9-1 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.
- 9-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal written advice that the requirements have been met.
- 9-3 Where compliance with any condition, procedure or commitment 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 this project under the provisions of Part V of the Environmental Protection Act.

CHERYL EDWARDES (Mrs) MLA MINISTER FOR THE ENVIRONMENT

1 4 JUN 1999

The Proposal

The proposal is to construct a new series (F series) of crystallizer ponds at the northern edge of the existing Shark Bay Salt crystallizers in Useless Loop, Shark Bay. The additional ponds will be located adjacent to the boundary of Mining Lease 260SA, located approximately 1.5 kilometres from the closest point of the Shark Bay World Heritage Property / Marine Reserve.

A two kilometre long sea-wall will enclose approximately 125 hectares of shallow marine environment, of which 60 hectares is seagrass (predominantly monospecific beds of *Posidonia australis*). Material to construct the seawall will be extracted from an existing borrow pit near the crystallizer ponds.

The key characteristics of the proposal are described in the table below.

Element	Description				
Area of disturbance	Approximately 150 hectares.				
Area of seagrass directly lost	Approximately 60 hectares.				
Seagrass type	Predominantly Posidonia australis.				
Seawall	2 kilometre long seawall with calcareous fill and rock armour on the seaward side.				
Construction material	Approximately 300 000 cubic metres of inert calcareous material for seawall construction and fill. Rock armour.				
Source of construction material	Existing borrow pit near F2 and Useless Loop township, which contains both rock and finer material.				
Period of construction	Approximately four months.				
Life of project	More than 20 years.				
Bitterns discharge	Initially disposal into ponds for sealing pond floors.				
	Long term disposal by use in sealing ponds and/or by infiltration into groundwater through purpose constructed impoundments in the salt field. Bitterns will not be discharged directly into the marine environment.				
Salt export	Expected to increase from ~0.9 Mt to ~1.6 Mt per annum.				
Shipping	Under current shipping practices, cargoes are expected to increase from 55 to 75 per annum.				

Maps

Figure 1: Location of the crystallizer ponds in relating to existing salt ponds and the Shark Bay World Heritage Area / Marine Reserve.

Figure 2: Cross-section of crystallizer levee wall.

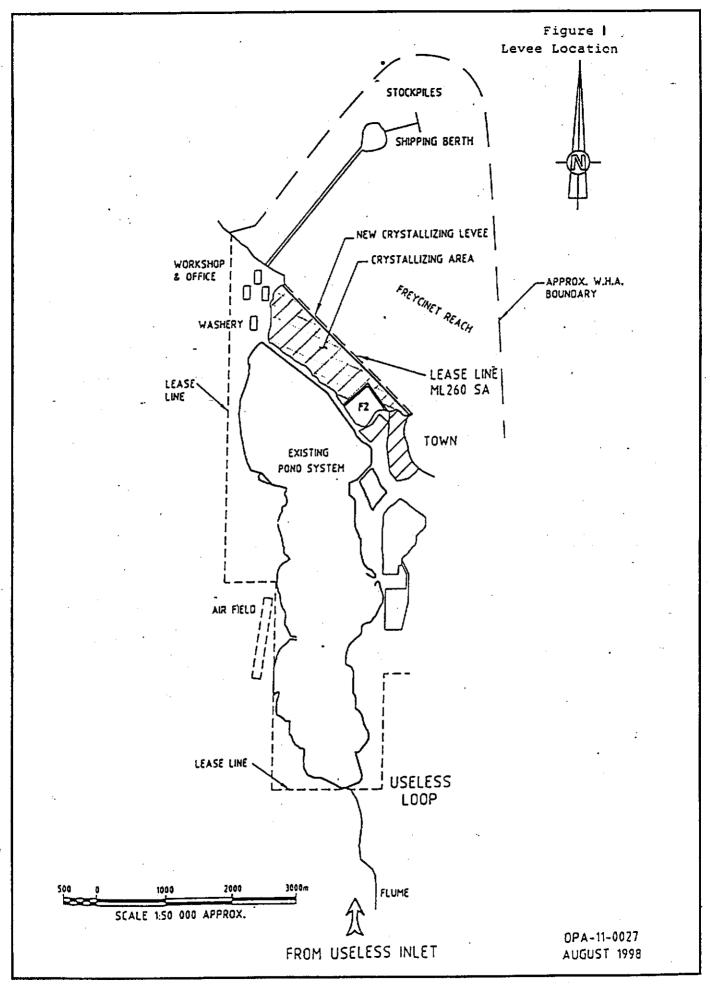


Figure 1. Levee location.

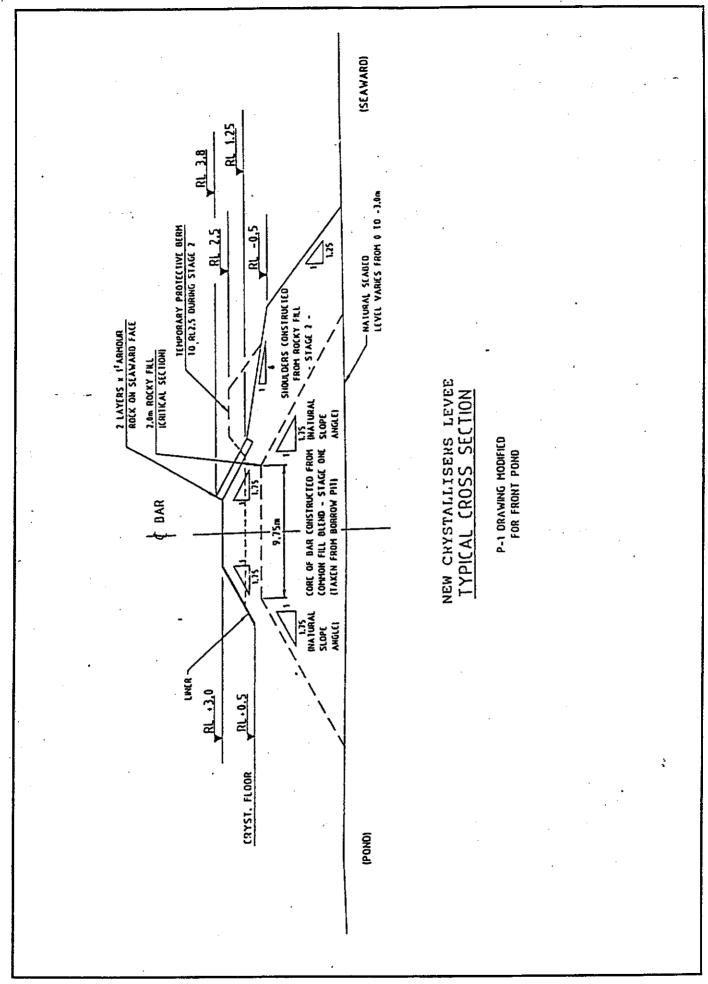


Figure 2. Typical cross-section.

Proponent's Consolidated Environmental Management Commitments

April 1999

Construction of additional crystallizers Useless Loop, Shark Bay (1193)

Shark Bay Salt Joint Venture

CONSTRUCTION OF ADDITIONAL CRYSTALLIZERS, USELESS LOOP, SHARK BAY (1193)

Measurement/ Compliance	Report in Annual Environmental Report (AER).	Report immediately to DEP is incident serious; otherwise in AER.	Consult with CALM in the event of doubtful plant identification, and if rare or priority species are discovered.	Report in AER.	Report incidents to DEP immediately if serious; otherwise in AER.	Photographic monitoring and success of rehabilitation will be reported in AER.	Report in AER.
On advice from	DEP	DEP	CALM	DEP	AQIS, DEP	DED.	DEP
Timing	Pre- construction	Operations	Pre- construction	Operations	Operations	Completion of construction.	Operations.
Action	The proponent will develop a turbidity management and monitoring plan which outlines proposed turbidity monitoring, including settlement on seagrass blades, and criteria for ceasing construction.	The proponent will relocate the established programme for monitoring seawater densities and chemical composition to the seaward side of the new facility.	Supplement previous DRF work by examination of areas prior to disturbance.	Bittems will be discharged of by use in sealing ponds and/or by infiltration in purpose constructed impoundments.	Continue awareness of and compliance with ballast management protocols.	Continue to implement the established programme for progressive rehabilitation of all disturbed areas.	Proponent will monitor groundwater adjacent to bitterns disposal areas.
Objective	To protect the adjacent marine environment from increased turbidity generated by the crystalliser embankment.	To identify and monitor any changes in seawater composition resulting from bitterns disposal. To ensure compliance with draft WA Guidelines for Fresh and marine Waters (EPA, 1993).	To ensure that no rare and priority flora are affected by borrow pit activities.	To prevent impacts on the adjacent marine environment as a result of bitterns discharge.	To reduce the potential for introduction of exotic species from ballast water.	Ensure that borrow pits and other disturbed areas are successfully rehabilitated.	To identify and monitor any changes in groundwater composition resulting from bitterns disposal.
Commitment	1. Turbidity generated by the crystalliser embankment will be monitored.	2. Marine water quality in the area adjacent to the crystalliser ponds will be monitored.	3. A survey for rare and priority flora will be carried out prior to disturbance of any areas.	4. Bitterns will not be discharged directly into the marine environment without prior consultation with the EPA and CALM.	5. Ships will comply with Australian Quarantine and Inspection Service (AQIS) guidelines for ballast management.	6. Borrow pits will be rehabilitated.	7. Groundwater quality adjacent to bitterns disposal areas will be monitored.

Abbreviations:
AQIS = Australian Quarantine & Inspection Service
CALM = Department of Conservation & Land Management

DEP = Department of Environmental Protection

EPA = Environmental Protection Authority