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State # 401

MINISTER FOR THE ENVIRONMENT WESTER

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

PROPOSAL: ONSLOW SOLAR SALT PROJECT (164 / 916)

CURRENT PROPONENT: ONSLOW SALT PTY LTD

CONDITIONS SET ON: 13 AUGUST 1991

The implementation of this proposal is now subject to the following conditions which replace all previous 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, including the documented modifications of January 1995, the proponent shall fulfil the relevant environmental management commitments in the Environmental Review and Management Programme (1990), published in Environmental Protection Authority Bulletin 495 as Appendix 1, and reported on in Environmental Protection Authority Bulletin 776; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

A copy of the revised environmental management commitments (April 1995) 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.

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3 Environmental Management Programme

A practical operational plan is needed to implement good environmental management.

- 3-1 The proponent shall prepare an Environmental Management Programme encompassing measures to monitor the environmental effects of the proposal and to provide appropriate management strategies based on the monitoring results, to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection. This Programme may consist of separate parts for each phase of the proposal, that is, pre-construction, construction, commissioning and operational.
- 3-2 The proponent shall implement the Environmental Management Programme required by condition 3-1.

4 Rehabilitation Plan for Disturbed Areas

Construction phase impacts need to be specifically addressed.

- 4-1 Prior to commencement of construction, the proponent shall prepare a rehabilitation plan for any disturbed areas such as borrow pits, quarries and access tracks, to the requirements of the Department of Environmental Protection on advice of the Department of Minerals and Energy.
- 4-2 The proponent shall implement the rehabilitation plan required by condition 4-1.

5 Flood Studies

The diversion of flood waters needs to be studied and managed.

- 5-1 The proponent shall continue to implement the surface waters monitoring programme, to the requirements of the Department of Environmental Protection on advice of the Water Authority of Western Australia.

6 Public Road Access

Public road access to Onslow must be maintained during construction.

- 6-1 During construction of the ponds, the proponent shall ensure that access on gazetted roads is not impeded and that causeways are maintained to the requirements of the Department of Environmental Protection on advice of the Main Roads Department.

7 Erosion Control

Impacts from the diversion of flood waters need to be managed.

- 7-1 Where lands are significantly adversely affected by erosion or flooding, the proponent shall undertake remedial measures.

8 Faunal Survey

Islands formed by the flooding of the salt field ponds may isolate sensitive fauna.

- 8-1 Prior to the flooding of the ponds, the proponent shall conduct a faunal survey of areas which will be isolated by the flooding of the ponds.
- 8-2 The proponent shall prepare a plan for the relocation of any populations of vertebrate fauna which are identified as sensitive by the Department of Conservation and Land Management, and which will be isolated on islands by the construction of the ponds, to the requirements of the Department of Environmental Protection on advice of the Department of Conservation and Land Management.
- 8-3 In the event that sensitive fauna are identified, the proponent shall implement the fauna relocation plan required by condition 8-2.

9 Mangroves and Related Ecosystems

The protection of coastal ecosystems, particularly mangroves, is important.

- 9-1 The proponent shall construct and manage the facility such that there are no significant indirect adverse impacts on the mangroves or algal mats beyond the boundary of the solar salt facilities.
- 9-2 Prior to the completion of pond construction, the proponent shall prepare a growth monitoring and rehabilitation plan for mangroves in the Beadon Creek area.
- 9-3 In the event that monitoring shows any areas of mangroves are likely to be or have been significantly adversely affected by the project, the proponent shall implement the plan required by condition 9-2, for rehabilitation or replacement of these mangroves, within a time-frame to be set by the Department of Environmental Protection after consultation with the proponent.

10 Monitoring of Bitterns

Undiluted bitterns may affect the productivity of the nearby prawning fishery.

- 10-1 The proponent shall monitor the dilution of the bitterns between the mouth of Middle Creek and the nearby prawning area to the requirements of the Department of Environmental Protection on advice of the Fisheries Department.

Note: The monitoring results will be used for resolving issues addressed by condition 19.

11 Dilution of Bitterns

The bitterns discharge channel needs to be kept open to the ocean to allow dilution.

- 11-1 To facilitate the unhindered discharge of bitterns from Middle Creek to the ocean, the proponent shall maintain adequate tidal exchange through the mouth of Middle Creek.

12 Pumping from Middle Creek

Any proposal to pump from Middle Creek needs environmental assessment.

- 12-1 The proponent shall refer to the Environmental Protection Authority any proposal for dissolution of bitterns with seawater pumped from Middle Creek.

13 Noise Management

The proponent has proposed appropriate noise control strategies with the objective of complying with the requirements of the relevant noise control regulations.

- 13-1 The proponent shall implement noise control strategies so as to meet the requirements of the relevant noise control regulations under the Environmental Protection Act.

These strategies could include, but need not be limited to the following:

- 1 the appropriate placement of earth bunding;
- 2 the reduction of sound levels on specific noise-making machinery;
- 3 daytime shift-only operation of the washplant;
- 4 use of rubber-tired vehicles rather than bulldozers where possible; and
- 5 not using bulldozers on faces of the salt stockpiles oriented towards the Town of Onslow between 2100 hours and 0600 hours.

14 Onslow's Groundwater

The freshwater lens under Onslow needs to be protected from saline intrusion.

- 14-1 Prior to construction of the ponds, the proponent shall prepare a groundwater monitoring programme for the townsite of Onslow, to the requirements of the Department of Environmental Protection on advice of the Water Authority of Western Australia.
- 14-2 Prior to construction of the ponds, the proponent shall implement the groundwater monitoring programme and monitor for at least ten years following the filling of the ponds.
- 14-3 The proponent shall protect Onslow's freshwater lens against saltwater intrusion from the ponds to the requirements of the Department of Environmental Protection on advice of the Water Authority of Western Australia.

15 Vegetation on the Islands

Vegetation on the islands formed by the ponds may be affected by saline intrusion.

- 15-1 The proponent shall monitor the vegetation on the shores of islands formed by the filling of the ponds for the effects of saline intrusion.
- 15-2 Where vegetation is killed, the proponent shall rehabilitate those areas by planting with salt-tolerant species.

16 Dredging Impacts

Sediment from the dredging operation may impact on Wards Reef.

- 16-1 The proponent shall monitor the effect on Wards Reef from sediment from the dredging of the shipping channel.
- 16-2 If the monitoring required by condition 16-1 shows that Wards Reef is adversely affected, the proponent shall stop the dredging operation.
- 16-3 If the dredging operation is stopped, the proponent shall prepare an alternative dredging plan to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection.

17 Beadon Creek

Dredge spoil could obstruct the entrance to Beadon Creek harbour.

- 17-1 During the dredging of the shipping channel, the proponent shall monitor the depth of the entrance channel of Beadon Creek.
- 17-2 If sediment from the dredge spoil causes significant obstruction of the entrance channel of Beadon Creek, the proponent shall remove the sediment, to the requirements of the Department of Environmental Protection on advice of the Department of Transport.

18 Oilspill Plan

The increased risk of oilspills from shipping needs management.

- 18-1 Prior to the construction of the trestleway, the proponent shall prepare an oilspill contingency plan to deal with both onshore and offshore spills, to the requirements of the Department of Environmental Protection on advice of the State Committee for Combatting Marine Oil Pollution.

19 Potential Impacts on Onslow Community and Fishing Industry

Potential conflicts with existing land/sea uses need management.

- 19-1 The proponent shall identify any impacts on the prawn fishery and resolve any issues which arise, to the requirements of the Department of Environmental Protection on advice of the Department of Resources Development and the Fisheries Department.

20 Decommissioning Plans

A decommissioning plan is required.

- 20-1 At least six months prior to cessation of operations, the proponent shall prepare a decommissioning plan, to the requirements of the Department of Environmental Protection on advice of the Department of Resources Development.

- 20-2 The proponent shall implement the decommissioning plan required by condition 20-1.

- 20-3 At least three months prior to any temporary suspension of operations, the proponent shall prepare a plan for the short-term care and maintenance of the project, to the requirements of the Department of Environmental Protection on advice of the Department of Resources Development.

- 20-4 The proponent shall implement the temporary decommissioning plan required by condition 20-3.

21 Proponent

These conditions legally apply to the nominated proponent.

- 21-1 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.

22 Time Limit on Approval

The environmental approval for the proposal is limited.

- 22-1 If the proponent has not substantially commenced the modified project within five years of the date of this statement, then the approval to implement the proposal as granted in the statement of 13 August 1991 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).

23 Compliance Auditing

To help determine environmental performance, periodic reports on progress in implementation of the proposal are required.

- 23-1 The proponent shall submit periodic Progress and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

Procedure

- 1 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.
- 2 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

Note:

- 1 The reporting requirements for these conditions may be effected through the reporting requirements of the State Agreement Act, subject to meeting the timing requirements of the conditions.

Hon. Peter Foss, MLC
MINISTER FOR THE ENVIRONMENT

20 NOV 1995

Proponent's Environmental Management Commitments

April 1995

ONSLOW SOLAR SALT PROJECT (164 / 916)

ONSLOW SALT PTY LTD

The proponent has made the following environmental management commitments:

SUMMARY OF COMMITMENTS

- 1 A suitably qualified environmental supervisor will be on-site at all times during the construction and commissioning phases of the project, to prepare and carry out environmental induction programmes for construction and operations workers and to ensure that work is performed in an environmentally acceptable manner.
- 2 Prior to the commencement of any site works it is the Proponent's intention to prepare a record of the current physical and biological environment by means of landsat images, aerial photographs, videos, still colour photographs, site surveys, soil samples, levels and the like, as considered appropriate by the Proponent. These records will serve as a reference for claims made of any damage which has resulted from works carried out by the Proponent.

Flooding and erosion

Road access

Uralla, Peedamulla Roads

- 3 The Proponent believes its works will have no impact on these gravel roads which are closed in flood time for a considerable number of days. However, the Proponent undertakes that it will reasonably do such things as are necessary to ameliorate or eliminate any impact that has been caused as a result of the project.

Water Authority pipeline

- 4 In conjunction with WAWA, a controlled-access road will be maintained along the pipeline which will be dependent on the resolution of public liability insurance, security, ongoing maintenance and operational matters. All access to bunds and sea walls will be fenced off (Section 8.3.2.7) which will prevent access to sensitive coastal areas.

Pastoral

- 5 If as a result of the Proponent's works, floodwaters backup in natural creeks and cause loss of pasture, stock, fences or other damage to pastoral property outside the Proponent's leases, the Proponent will discharge its legal obligations to compensate the pastoral leaseholder for the loss incurred.

Erosion

- 6 If detrimental scouring occurs in creek beds, creek walls or the salt flats or along the edges of islands as a direct result of the Proponent's works, the Proponent will repair and/or stabilise such erosion by stonepitching, regrading or redesign as appropriate to the reasonable satisfaction of the Minister for the Environment.

Racetrack

- 7 The Proponent commits to monitoring the situation in the area of the existing Onslow race track to determine if its works are increasing the incidence of flooding. If this can be proved the Proponent undertakes to carry out such remedial works as may be reasonably necessary e.g. a bund around the racetrack.

Indigenous animals

- 8 The Proponent has committed to carrying out a faunal survey of areas which will be isolated by flooding of the ponds before work commences. If isolated islands within the ponds become over-populated or fauna is endangered as a result of the Proponent's work, the Proponent will undertake a study by experts of the situation to determine which animals can survive under the new conditions and which animals may need to be removed by the Proponent to the mainland or larger islands and put into effect remedial management practices.

Beadon Creek

- 9 The Proponent has initiated a growth monitoring programme in the Beadon Creek catchment. If significant damage is occurring or seems likely to occur to mangroves as a result of the Proponent's works, the Proponent undertake to carry out a study by experts to determine the nature of the problem and its possible remedies and to prepare and implement a plan for rehabilitation of those mangroves and algal mats to the satisfaction of the Minister, for example:
 - 1 restriction of pumping at high tide;
 - 2 irrigate creek headwaters with seawater from the creek or the first evaporation pond to promote mangrove growth;
 - 3 propagate mangroves in irrigated areas; and
 - 4 construct a flood channel to allow inland floodwaters to flow through the condenser ponds to Beadon Creek.

The Proponent undertakes to carry out the most appropriate remedy to the extent reasonably necessary.

Discharge of bitterns

- 10 Bitterns will be discharged in a controlled manner into Middle Creek at half tide or higher via a channel with an invert level below the mangrove root zone. The proponent shall undertake a monitoring programme, to the satisfaction of the Environmental Protection Authority, to demonstrate that the discharge strategy is environmentally acceptable or, if significant damage is occurring, or seems likely to occur, prepare and implement a revised discharge strategy and rehabilitation plan to the satisfaction of the Minister for the Environment.

Noise

- 11 Noise will be maintained at or below statutory levels for residential areas through construction of bunds, work practice and design of machines. Noise will be monitored in the early stages of operation and, if unacceptable levels are detected, the Proponent will take action to reduce emissions to acceptable levels. Noise levels will be monitored continuously by an automatic recorder near Clarke Place during the early stages of full scale operation to ensure that the acceptable standards and predictions are being met. The recordings will be displayed in the Supervisor's office for his attention if needed. Continuous monitoring shall be for a period of 12 months whereupon the need will be reviewed and continued if necessary as agreed with the EPA.

Groundwater regime (Onslow)

- 12 The Proponent will install groundwater monitoring sites within the townsite of Onslow and continue to monitor these sites for a minimum period of 10 years from when the ponds are filled and take whatever action is necessary to maintain Onslow's gardens against saltwater encroachment from the ponds, to the satisfaction of the Environmental Protection Authority.
- 13 Island foreshores will be monitored for the effects of rising saline groundwaters and areas where vegetation has been subsequently lost as a result of increased salinity will be rehabilitated by planting with salt tolerant species.

Marine impacts

Dredging

- 14 No dredging will be carried out within 800 metres of Wards Reef. No spoil will be dumped on or within 500 metres of Wards Reef. The proponent will monitor the effect of suspended sediment arising from the dredging and dumping operation on Wards Reef. If the reef is shown to be adversely affected, the dredging operation will be stopped or relocated to another area until an alternative dredging plan is approved.
- 15 No channel blasting will be undertaken near Wards Reef without further environmental assessment by the EPA.
- 16 The Proponent is committed to monitoring the dredging operation with the aim of minimising the impact on environmentally sensitive areas and the adjacent trawling grounds.
- 17 Specifications will provide for spoil to be kept within the designated areas and heights stated in the ERMP and kept reasonably level. The project supervisors and dredge master will be educated on the importance and relevance of the specifications.
- 18 If material from the spoil banks is shown to be contributing to siltation at the mouth of Beadon Creek then the Proponent will: remove such accumulation due to its works; take reasonable steps to prevent such accumulation from occurring.

Shipping

- 19 Fuel will be stored and conveyed according to standard regulations. A tug/workboat with boom and skimmer and line boat permanently stationed at Onslow will be equipped to deal with marine spills. The Proponent confirms its undertaking in the ERMP to construct all fuel facilities with the most up-to-date protection measures. In addition:
 - 1 an oil spill contingency plan to deal with both offshore and onshore spills consistent with the then current industry standards will be in place together with all such equipment needed before the construction of the trestleway.
 - 2 a ballast plan consistent with the then current industry standards also will be in place before any salt carrying ships are allowed to use the Proponent's jetty.

Construction

- 20 The Proponent's environmental management programme will take into account the potential problems associated with the disposal of rubbish and the behaviour of personnel arising from its construction camp.
- 21 A condition of the Construction Contract will specify that personnel are to keep to designated tracks and to extract material only from selected sites to reduce the impact of vehicles and quarrying on the countryside.
 - 1 All access to bunds and seawalls will be fenced off which will prevent access to sensitive coastal areas.
 - 2 All quarry sites will be made safe, rehabilitated and fenced off apart from those portions required for maintenance.
 - 3 Borrow pits will be left in a safe, stable and rehabilitated condition as soon as possible after use, with walls battered and topsoil respread so as to encourage revegetation.
 - 4 Noise and dust emissions will be managed and movement of vehicles on local roads will be minimised.
 - 5 Roads and carparks in the vicinity of the stockpile/washplant will be sealed if necessary.
 - 6 The haulroad will be sheeted with gravel and watered.
 - 7 A part-time community worker will be engaged to assist the new workforce integrate with locals.
 - 8 Consultation with local Aboriginal people will be ongoing during construction near known sites which will be fenced in parts where they could be accidentally damaged by Contractors plant and personnel.
 - 9 Light emissions will be managed through design so as to have minimal impact on Back Beach and the adjacent residential area. (Section 8.3.2.2).
 - 10 A tree and shrub planting programme will be initiated for the areas affected by the Project.
 - 11 If the Bindi Bindi community wishes to supply and maintain the trees they will be contracted to do so.
 - 12 The Proponent will, subject to agreement, contribute towards the cost of upgrading the water supply main in conjunction with WAWA.

Social

Access to jetty

- 22 The Proponent confirms its undertaking in the ERMP that the public may use the jetty at their own risk from 6.00 am to 10.00 pm whenever the jetty is not required for reasonable operational purposes. The existing level of access to Back Beach will not be restricted.
- 23 The Proponent in conjunction with the Shire will maintain third party insurance for use of the jetty and assist in maintaining Local Authority by-laws on and near the jetty. If the public consistently abuse the privilege offered or damage the Proponent's property, the rights of access will be restricted or withdrawn.

Local community consultation

- 24 The Proponent is committed to ongoing community consultation, and formal liaison and monitoring processes to be established by the Proponent to the satisfaction of the Environmental Protection Authority to monitor, review and manage the social impact of the project throughout its life.
- 25 Reporting on this liaison, monitoring and management of the social impacts will be part of the Proponent's monitoring reports to the Environmental Protection Authority.
- 26 The Proponent will specifically:
 - 1 employ a person, in conjunction with DET, to liaise with the Aboriginal community to establish an Aboriginal Employment Action Plan;
 - 2 create specific employment training strategies for the local community and provide opportunities for training courses in conjunction with DET. (NB. DET has committed itself to providing a community based resource person to liaise with the person in 1 above);
 - 3 make provision to train at least two unskilled workers at all times in specific skills and tasks and provide for formal industrial training.

Environmental Management Programme

Report

- 27 Prior to the start of construction of each phase of the proposal, the Proponent will prepare, submit and subsequently implement an Environmental Management Programme (EMP) that addresses, where appropriate, the monitoring, management, auditing and reporting requirements of the following issues:
 - 1 impacts associated with onshore and offshore construction;
 - 2 fauna survey and relocation plan for islands isolated by salt ponds;
 - 3 ongoing monitoring in Beadon, Middle and Four Mile Creek systems to safeguard the mangrove and algal mat environments;
 - 4 the mouth of Beadon Creek to maintain present access levels;
 - 5 noise levels in Onslow arising from the processing facilities;
 - 6 oilspill contingency plan to minimise impacts from onshore and offshore spills;
 - 7 groundwater salinity and levels in the town of Onslow and on susceptible islands;
 - 8 community consultation, monitoring and liaison;
 - 9 areas under rehabilitation;

to the satisfaction of the Environmental Protection Authority.

Monitoring manual

- 28 The Proponent will keep on-site a Monitoring Manual which will contain separate sections as above for each phase of the project, the relevant baseline data, the monitoring commitments in detail, standard forms and frequencies for various tests required, management procedures necessary for different circumstances and reporting requirements.

The Manual will be designed to introduce new employees to the environmental requirements and commitments of the project. It will be available at all times to visitors from the Environmental Protection Authority or other government agencies needing such information.