



MINISTER FOR THE ENVIRONMENT;  
EMPLOYMENT AND TRAINING

Ass # 1092

Bull # 857

State # 451

**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 / 1092)  
CURRENT PROPONENT: ONSLOW SALT PTY LTD  
CONDITIONS SET ON: 13 AUGUST 1991  
CONDITIONS AMENDED ON: 20 NOVEMBER 1995

The implementation of this proposal is now subject to the conditions contained in Ministerial Statement No. 401 (November 1995), subject to the amendment and addition of the following conditions:

*Conditions 1, 2 and 22 are amended to read as follows:*

**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 February 1997, the proponent shall fulfil the relevant environmental management commitments made in the Environmental Review and Management Programme (1990), and published in Environmental Protection Authority Bulletin 495 as Appendix 1; in the Section 46 report (1995), and published in Environmental Protection Authority Bulletin 776; and in the documentation on the extension of the Onslow Solar Salt Project in February 1997, reported on in Environmental Protection Authority Bulletin 857; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement or in statement no. 401 (November 1995), which also remains applicable to this project.

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

A copy of the environmental management commitments, as modified in April 1997, is attached.

Published on

**26 JUN 1997**

## **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 initially with the proposal, and reported on in Environmental Protection Authority Bulletin 495 (1991) and subsequently, in Environmental Protection Authority Bulletins 776 (1995) and 857 (1997), as part of further consideration under Section 46 of the Environmental Protection Act.
- 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.

## **22 Time Limit on Approval**

The environmental approval for the substantial commencement of 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 modified proposal 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.

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.

*The following condition is inserted following condition 23:*

## **24 Environmental Management System**

The proponent shall exercise care and diligence in accordance with best practice environmental management principles.

- 24-1 In order to manage the relevant environmental factors, to meet the environmental objectives in Environmental Protection Authority Bulletin 857, and to fulfil the requirements of the conditions and procedures in this statement, prior to construction, 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.
- 24-2 The proponent shall implement the environmental management system referred to in condition 24-1.

*The following notes are inserted following note 1:*

- 2 The Environmental Protection Authority reported on the proposal in Environmental Protection Authority Bulletins 495 (January 1991), 776 (April 1995) and 857 (June 1997).
- 3 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.

~~CHEYL EDUARDES (Mrs) MLA~~  
MINISTER FOR THE ENVIRONMENT

26 JUN 1997

**Proponent's Environmental Management Commitments**

**April 1995, as modified in April 1997**

**ONSLOW SOLAR SALT PROJECT  
(164 / 916 / 1092)**

**ONSLOW SALT PTY LTD**

## SUMMARY OF COMMITMENTS

### General

- 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 Corporation pipeline

- 4 In conjunction with the Water Corporation, 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 Environmental Protection Authority.

## 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 specified in the 1997 Section 46 report and during subsequent assessment procedures. 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.
- 19 The Proponent will monitor the stability of spoil disposal sites and the sedimentation rate on Ward's Reef, and if significant impacts on the sedimentation rate on adjacent coral reefs is detected, the proponent will consult the Department of Environmental Protection to develop practical strategies to alleviate such impacts.

### Shipping

- 20 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

- 21 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.
- 22 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 the Water Corporation.

## Social

### Access to jetty

- 23 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.
- 24 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**

- 25 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.
- 26 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.
- 27 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**

- 28 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; and
  - 9 areas under rehabilitation;

to the satisfaction of the Environmental Protection Authority.

**Monitoring manual**

- 29 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.

## Attachment 1 to Ministerial Statement 451

### Change to proposal under s45C of the *Environmental Protection Act 1986*

**Proposal: Onslow Solar Salt Project**

**Proponent: Onslow Salt Pty Ltd**

**Changes:** Increase in production capacity; decrease in haulage, washing and stacking rate; addition of three crystalliser ponds; decrease in bitterns discharge volume; correction of water use units.

**Key Characteristics Table:** Changes from project proposal described in EPA Bulletin 857

<u>Element</u>	<u>Description of proposal</u>	<u>Description of approved change to proposal</u>
Production (Mtpa)	2.5	<b>3.5</b>
Haulage, washing and stacking rate (Tph)	1,500	<b>650</b>
Seawater pumping capacity (m <sup>3</sup> /sec)	12	12
Wash water (m <sup>3</sup> /hr)	250 litres/s	<b>250 m<sup>3</sup>/hour</b>
Condenser ponds (ha)	8,000	8,000
Settling ponds (ha)	5	5
Crystalliser ponds (ha)	820	<b>1,040</b>
Stockpile volume (m <sup>3</sup> )	1,000,000	1,000,000
Bitterns discharge (m <sup>3</sup> /d)	25,000	<b>22,500</b>
Jetty length (m)	1,250	1,250
Dredge channel depth (m below Chart Datum)	10.8	10.8
Dredge channel length (km)	9.6	9.6
Dredge channel width (m)	120	120
Dredge spoil (m <sup>3</sup> )	3,000,000	3,000,000
Spoil disposal sites	East of Channel - one site	East of Channel - one site
Ship size (DWT)	45,000	45,000
Ship loading rate (tph)	2,000	2,000
Power consumption (MW)	3	3

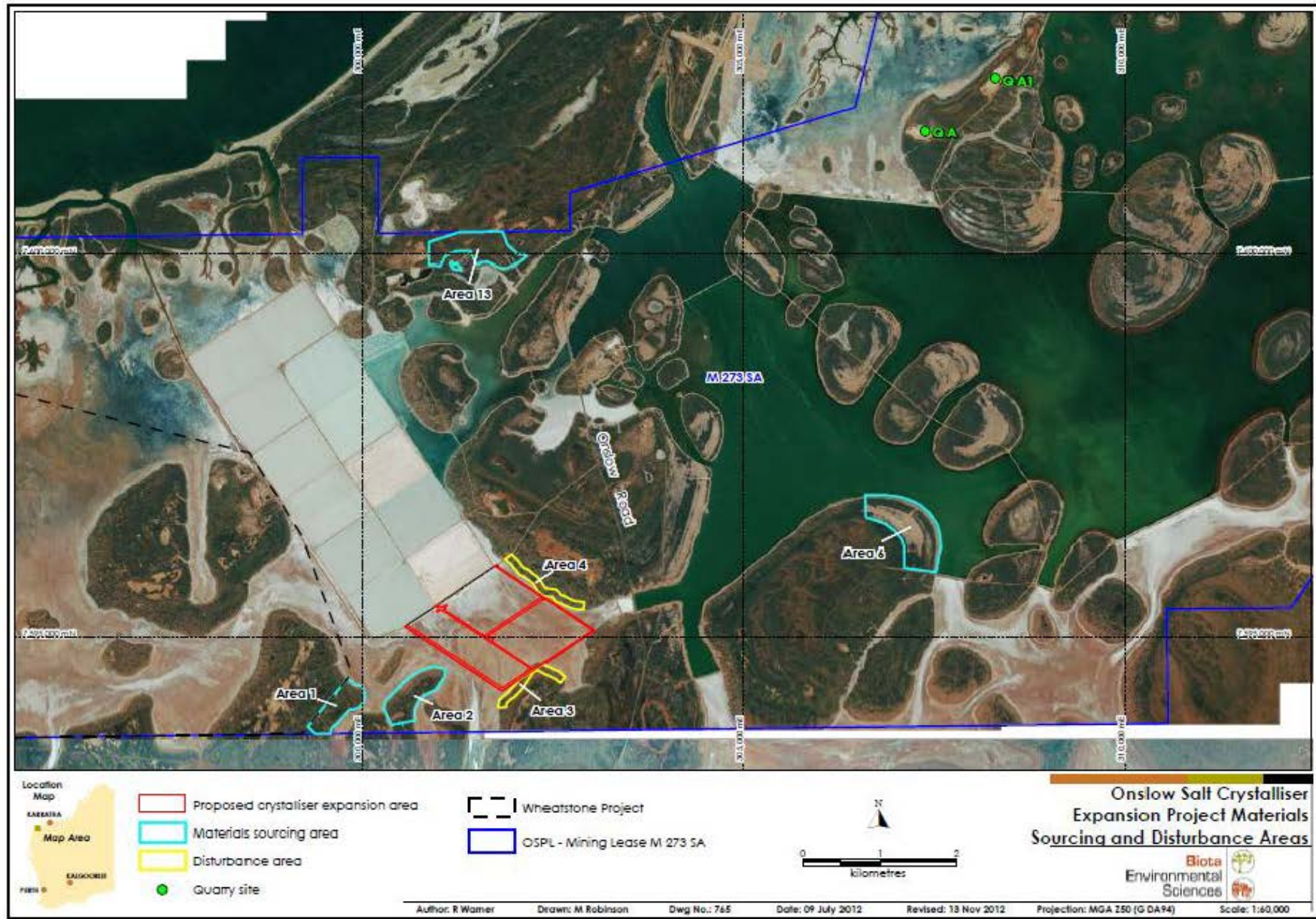
Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

**List of Replacement Figures:** Figure 1: Onslow Salt proposed crystalliser expansion project and material sourcing and disturbance areas

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**Dr Paul Vogel**  
CHAIRMAN  
Environmental Protection Authority  
under delegated authority

Approval date: 12 February 2013



**Figure 1: Onslow Salt Pty Ltd proposed crystalliser expansion project and material sourcing and disturbance areas**