



Conservation Commission
of Western Australia

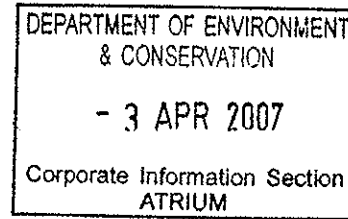
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File No:

FILE → DEC2417-02

The Chairman
Environmental Protection Authority
PO Box K822
PERTH WA 6842



Attention: Dr Sue Osborne

DOC 19114

SCANNED

Dear Sue

STRAITS SALT PTY LTD YANNARIE SOLAR SALT ERMP: (ASSESSMENT NO. 1521)

Although the Conservation Commission was unable to prepare detailed comment on the proposal referred to in this Environmental Review and Management Programme (ERMP), we have recently received a copy the Department of Environment and Conservation (DEC) advice and comments on the proposal and wish to have the Conservation Commission's views on these considered by you.

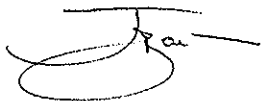
DEC's comments highlighted the significant scale of the proposal and the considerable amount of information that is either incomplete or absent in the ERMP as provided, notwithstanding the preparation of supplementary reports that is proposed. These and other shortcomings were deemed by DEC to make it unable to assess the environmental impact of the proposal.

This proposal involves a major disturbance to a marine and coastal area of very high national and international conservation significance. It may also pose considerable ecological risks to important coastal and marine ecosystem values in the Exmouth Gulf and nearby Cape Range sub-bioregion. Furthermore the proposal would preclude future opportunities to conserve an outstanding area of a largely intact coastal ecosystem type with significant potential as an area for economically important nature based tourism. As such it is critically important that the highest level of information to enable an informed decision is made.

Based on the information provided in DEC's comments, and considering the widely acknowledged biodiversity values that occur within the footprint of the proposal, and areas adjacent to this that may be affected, the Conservation Commission endorses the view that the proposal should not receive environmental approval.

Should the proposal or a variation thereof, be recommended for approval by the Environmental Protection Authority, the Conservation Commission would seek an opportunity to provide advice on conservation management issues within an appropriate timeframe.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Bailey', with a horizontal line above it.

Dr John Bailey
Chairman

2 April 2007



Orig 23

Our Ref: 11-8144

Dr Walter Cox
Chairman
Environmental Protection Authority
PO Box K822
PERTH WA 6842

ENVIRONMENTAL PROTECTION AUTHORITY	
Records Services Received	
	20 MAR 2007
Ref No	EPIN 1398
EPA File No	EPA 776
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Attn: Dr Sue Osborne

*Dr Sue Osborne
F.Y. Attention
WIC
20/3/07*

Dear Dr Cox

Thank you for your letter dated 1 December 2006 regarding the Environmental Review and Management Programme (ERMP) for the Yannarie Solar Salt project (Assessment No 1521).

I am advised that the ERMP contains inadequate and incorrect information about Aboriginal heritage matters, the *Aboriginal Heritage Act 1972* (AHA). The following issues need to be addressed by the proponent, Straits Exmouth Salt, in Volume 1:

- the company appears to equate the State legislation, AHA, with the Commonwealth legislation, which addresses native title issues, on pages 7-17 and 7-19;
- the DIA has no record of reports done by Archae-Aus in 2005 to verify the statements and results made within the draft ERMP, pages 7-17 to 7-24;
- the sites located on Figures 7-6 and 7-7 within the ERMP have not been registered with the DIA; and
- the removal of artefacts pictured in the photo in Figure 7-8 may be in breach of the AHA, far as we can be ascertained, the Registrar of Aboriginal sites has not granted a section 16 to mitigate or undertake archaeological research on the Aboriginal sites from which these artefacts were removed.

In Volume 2 regarding the Aboriginal Sites Management Plan, the following needs to be addressed:

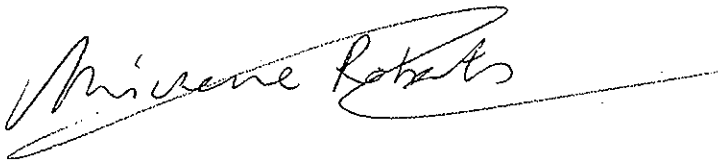
- the methods to be used to protect Aboriginal sites;
- The procedures to be followed if an Aboriginal archaeological or ethnographic site is impacted needs to include reporting the incident to the Registrar of Aboriginal sites at the Department of Indigenous Affairs (DIA), as well as the local Aboriginal community. In addition, the site should be recorded and a site form submitted to DIA. Finally, depending upon the findings, the proponent would need to apply for permission to use the land upon which the site was located in accordance with Section 18 of the AHA.

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- Should any human skeletal material be encountered during the course of site works, all works would need to cease immediately. The first point of contact would need to be the WA Police Service, as the area becomes a crime scene. In addition the DIA would need to be contacted and the Commonwealth Minister for Families, Community Services and Indigenous Affairs notified. The site should be secured and discussions held with the relevant community representatives to determine the next steps, if determined to be an Aboriginal burial.

At this stage I am not in a position to make any further comments, particularly in relation to other environmental and management programmes which do not involve Aboriginal heritage matters.

Should you require any further assistance on matters related to Aboriginal heritage I would encourage you to contact the Acting Director General of the Department of Indigenous Affairs, Ms Amanda Cattermole.

Yours sincerely



**HON MICHELLE ROBERTS MLA
MINISTER FOR INDIGENOUS AFFAIRS**

19 MAR 2007

COMMENTS ON EPA DOCUMENTS

Title of Document	Yannarie Solar a Straits Initiative - Environmental Review and Management Programme
Project	Yannarie Solar Project
Proponent	Straits Salt Pty Ltd (Straits) - wholly owned subsidiary of Straits Resources Limited

1. Level of Assessment

Environmental Review & Management Programme (ERMP)

The ERMP will satisfy the requirements of both the DEH and the EPA.

2. Summary of Proposed Activities

Straits propose constructing and operating a 10 Mtpa solar saltfield on the eastern margin of the Exmouth Gulf in Western Australia. There is a high demand for salt in the Asia-Pacific region (surge in industrial projects in China).

Conventional solar salt production involves natural evaporative processes to crystallise sodium chloride salt from seawater. No chemical processing or hazardous chemicals are involved. The Exmouth Gulf experiences an average annual rainfall of 260 mm and an average annual evaporation rate of 3140 mm.

Seawater is pumped from Dean's and Naughton Creek into a series of large, shallow concentration ponds where solar energy evaporates water and concentrates the dissolved salts as it proceeds through the ponds. The concentrated product is transferred to the smaller crystalliser ponds (50) where the salt then crystallises out of solution. The residual brine (bitterns) is continually discharged from the crystalliser ponds. Other residual salts are extracted using other ponds. Other products include potassium and magnesium.

The project area is 41,364 ha.

Straits have set a goal of zero discharge of bitterns. A bitterns resource recovery strategy has been proposed. If bitterns need to be discharged, a separate EPA proposal will be lodged.

There are four proposed stages:

- Stage 1:- establish a saltfield at the southern end of the lease having a nominal capacity of 3.1 Mtpa.
- Stage 2:- increase the capacity of the southern end to a nominal 4.7 Mtpa

Following an acceptable environmental review by the EPA, the project could proceed to stages 3 and 4.

- Stages 3 and 4:- establish a saltfield at the northern end of the lease having an ultimate capacity of 5.8 Mtpa. (Combined capacity of 10 Mtpa).

Stages 1 and 2 are expected to take at least 10 yrs to fully establish.

3. Location

Eastern margin of the Exmouth Gulf, Western Australia. The Gulf is 3000 km².

Twenty potential locations along the north west coast of Western Australia were considered. Of the top five sites, the east Exmouth Gulf, combined with the Tubridgi Point & salt evaporator provided a large enough area.

4. Tenure

The proposed Yannarie Solar Project is currently on E8/1395 – 1402, E8/1418, R8/1419 & E8/1421. Straits have lodged a Mining Proposal to apply for a Mining Lease. The proposed footprint occurs within Ministerial Temporary Reserve 70/5350 (TR 70/5350).

5. Advice required from DoIR (as per Table 5 in Executive Summary document)

Nil. Topics for which advice should be sort from DoIR for:

- The Construction EMP
- The EMP
- Soils and landforms
- Surface water

6. Comments & Recommendations

Chapter 2

- Section 3.5: Straits state they have set a goal of zero discharge of bitterns and plan to submit a separate referral to the EPA for the disposal of any bitterns not able to be practicably re-used or contained. Options for the final discharge of this end product need to be considered prior to the start of the project.
- Section 3.8.2: Advice on the geotechnical aspects of levee banks will be sought from DoCEP if the project proceeds to the Mining Proposal stage. The design and construction of the levee banks will need to meet DoCEP requirements. No comments of the capacity and design of the levee banks will be made at this stage of the project's assessment.
- Section 3.9: During a consultation meeting between DoIR and Straits, Straits advised that they were yet to determine a source of suitable material for the construction of the levee banks. Further exploration was required.
- Section 4: EPA should seek a commitment from Straits to rehabilitate the old Talandji salt infrastructure which are in the proposed project area.

Chapter 3

- Section 3.3: Subterranean Fauna – Straits have rationalised that the pond area is unlikely to contain subterranean fauna given the geology of the area. However testing is proposed for the areas to be dewatered (eg. limestone quarrying). Not many details about the sampling was given, it is recommended that stygofauna bores are installed at least 6 months prior to sampling. No information was provided on how potential impacts will be managed.

Chapter 5

- Section 3.4.2: Diversion and redirection of inland storm water flows, concentrating the storm water and directing the water to specific points rather than natural breakout points may lead to increased degradation in these areas.

Chapter 6

- Page 6-66: Although considered to be unlikely, there were no details on what the corrective actions would include if sedimentation in the Naughton Creek was impacting on mangrove and algal mat systems.

General

- Not sure of the proposed location of topsoil stockpiles, height of stockpiles, whether cleared vegetation will be stockpiled and how these stockpiles will be safeguards against damage from storm events.

stockpile
management

Management Plans

- Acid sulphate Soils Management Plan:
 - ⇒ Table 2-8: The depth of disturbance for the seawater pumps and associated pipe routes is difficult to interpret.
 - ⇒ What is the disposal site for the material gained from dredging the barge harbour and barge channel?
 - ⇒ The barge harbour material is likely to have an ASS disturbance risk rating higher than "Low"
 - ⇒ The baseline surveys need to be conducted prior to the lodgement of the Mining Proposal to DoIR, rather than just prior to construction.
 - ⇒ The soil sampling and analysis should follow the DEC ASS guidelines
 - ⇒ Point 5 in Section 6.5.2 (P. 2-37): acid generating capacity needs to be determined through lab testing, not field testing.
 - ⇒ When stockpiling ASS material, it must have appropriate containment.
 - ⇒ Neutralisation of soils – (p. 2-39) what depth of water cover will be used for a wet cover system for acid generating soils, and how will this be maintained given the high evaporation rate in the area? Trials are recommended to test the efficiency and whether sufficient material is available to neutralise via mechanical mixing.
 - ⇒ A crushed lime base for the storage of ASS material should be lined with a compacted clay liner.
 - ⇒ A conservative approach should be adopted regarding the re-use of treated soils for fill in borrow pits or fill for haul roads.
 - ⇒ Table 2-10: Monitoring needs are inadequate. Monitoring is recommended during the construction phase of the seawater pumps and the barge harbour.
- Preliminary Closure Management Plan
 - ⇒ First para' should read *Mining Act 1978* rather than 1976.
 - ⇒ (p.2-45) The third broad site closure objective for Straits needs to be expanded to include environmental objectives. This should include: non-polluting, and that the area will be stabilised with resilient, perennial, self-supporting vegetation comprising local provenance species where appropriate.
 - ⇒ If roads are to be handed over to the local pastoralist, this would need to be ratified by the Pastoral Lands Board
 - ⇒ It is assumed that the "Bridges and trestle structures" includes the diversion channel structures.

Danielle Risbey
SENIOR ENVIRONMENTAL OFFICER
23 February 2007

