

Anthony Sutton
Executive Director, EPA Services
Department of Water and Environmental Regulation
Level 4, The Atrium, 168 St Georges Terrace, PERTH WA 6000

Att: Peter Tapsell and Vanessa Robinson

Dear Mr Sutton,

RE: REQUEST FOR CHANGE TO THE MARDIE SALT PROJECT PROPOSAL

The Mardie Project (the proposal) was referred to the Environmental Protection Authority (EPA) by Mardie Minerals Pty Ltd (Mardie Minerals) under Section 38 of the *Environmental Protection Act 1986* in April 2018. The proposal is currently under assessment to determine the level of assessment.

Mardie Minerals is currently investigating the economics of direct export from Mardie via a new trestle jetty and associated dredge channel. These facilities were not included in the original Section 38 Referral and as such, Mardie Minerals requests a change to the current proposal.

In a meeting with EPA Services on 18 May 2018, it was discussed that this change may be able to be considered via a letter submission, therefore I have provided this letter, which contains the information relevant to the change, as well as updated shapefiles.


The proposed change is not expected to change the relevant Key Environmental Factors or the level of assessment, however the proposal Key Characteristics will need to be revised. I have provided revised tables in Table 1 and 2 below. Please note that two barge channel options are proposed for the export facilities, and the new Dredge Channel Development Envelope encompasses both options, however only one of the options will be developed (to be determined after additional subtidal investigations). Disturbance limits in Table 2 have been calculated using the option with the largest disturbance.

The title of the proposal has also been changed from 'Mardie Salt Project' to 'Mardie Project', to reflect the planned production of another products (i.e. sulphate of potash) in addition to salt.

Attached to this letter is a figure that shows the revised development envelopes and indicative disturbance footprint. This figure is intended to be a replacement of Figure 2 in the Section 38 referral supporting document.

If you have any queries on the above or require any additional information please contact Gavin Edwards on gedwards@prestonconsulting.com.au.

Yours sincerely,



Michael Klvac
Project Director

Table 1: Summary of the proposal

Proposal Title	Mardie Project
Proponent Name	Mardie Minerals Pty Ltd
Short Description	<p>Mardie Minerals Pty Ltd is seeking to develop a greenfields high-volume salt and Sulphate of Potash project and associated export facility at Mardie, approximately 80 kilometres (km) south west of Karratha, in the Pilbara region of Western Australia (WA). The proposal will utilise seawater and evaporation to produce a concentrated salt product and other associated products.</p> <p>The proposal includes the development of seawater intake, concentrator and crystalliser ponds, processing plant, bitterns disposal pipeline and outfall, trestle jetty export facility, dredge channel, administration buildings, drainage channels and sea walls, access / haul roads, desalination plant, borrow pits, freshwater supply bores and pipelines, and associated infrastructure (power supply, communications, workshop, laydown, sewage treatment plant, landfill facility etc.).</p>

Table 2: Location and proposed extent of physical and operational elements

Element	Location	Proposed Extent
Physical Elements		
1. Ponds Development Envelope – evaporation and crystalliser ponds, Processing Plant, desalination plant, administration, accommodation camp, associated works (access roads, laydown, etc.)	Figure 2	Disturbance of no more than 9,200 ha within the 15,002 ha Ponds Development Envelope.
2. Marine Development Envelope – trestle jetty export facility, seawater intake and pipeline, bitterns pipeline, outfall diffuser and mixing zone	Figure 2	Disturbance of no more than 40 ha within the 280 ha Marine Development Envelope.
3. Terrestrial Infrastructure Development Envelope – access / haul road, quarry, laydown, groundwater source bores, additional infrastructure	Figure 2	Disturbance of no more than 165 ha within the 338 ha Terrestrial Infrastructure Development Envelope.
4. Dredge Channel Development Envelope – dredged channel to allow access for transshipment vessels	Figure 2	Disturbance of no more than 146 ha within the 1317 ha Dredge Channel Development Envelope.
Operational Elements		
Bitterns discharge	Figure 2	Discharge of up to 3.6 GLpa of bitterns within a dedicated offshore mixing zone.
Desalination Plant discharge	Figure 2	Discharge to evaporation ponds only.
Groundwater abstraction	Figure 2	Abstraction of no more than 2 GL/yr.
Dredge volume	Figure 2	Dredging of no more than 500,000 m ³ of material, with the material to be deposited within the Ponds Development Envelope