

Environmental Protection Act 1986

Section 43A

**NOTICE OF DECISION TO CONSENT TO CHANGE TO
PROPOSAL DURING ASSESSMENT**

PERSON TO WHOM THIS NOTICE IS GIVEN:

K plus S Salt Australia Pty Ltd (ACN: 607 033 447)
Level 27, 44 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:

Ashburton Salt Project – Assessment No. 2101

Pursuant to section 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) consents to the proponent making the following changes to the proposal during assessment without a revised proposal being referred:

1. An increase in the annual quantity of salt to be produced by the project from 3.5 million tonnes per annum (Mtpa) to 4.5 Mtpa due to the higher than originally estimated naturally occurring concentration of salt in the water of Exmouth Gulf (Figure 1); and
2. An increase of approximately 30% in the concentration of seawater salts (other than sodium chloride) in the bitterns that will be discharged into the marine environment due to the higher than previously expected naturally occurring concentration of these salts within the local seawater.

EFFECT OF THIS NOTICE:

1. The proponent may change the proposal as provided for in this notice.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.



Dr Tom Hatton
Delegate of the Environmental Protection Authority
CHAIRMAN

18 December 2018

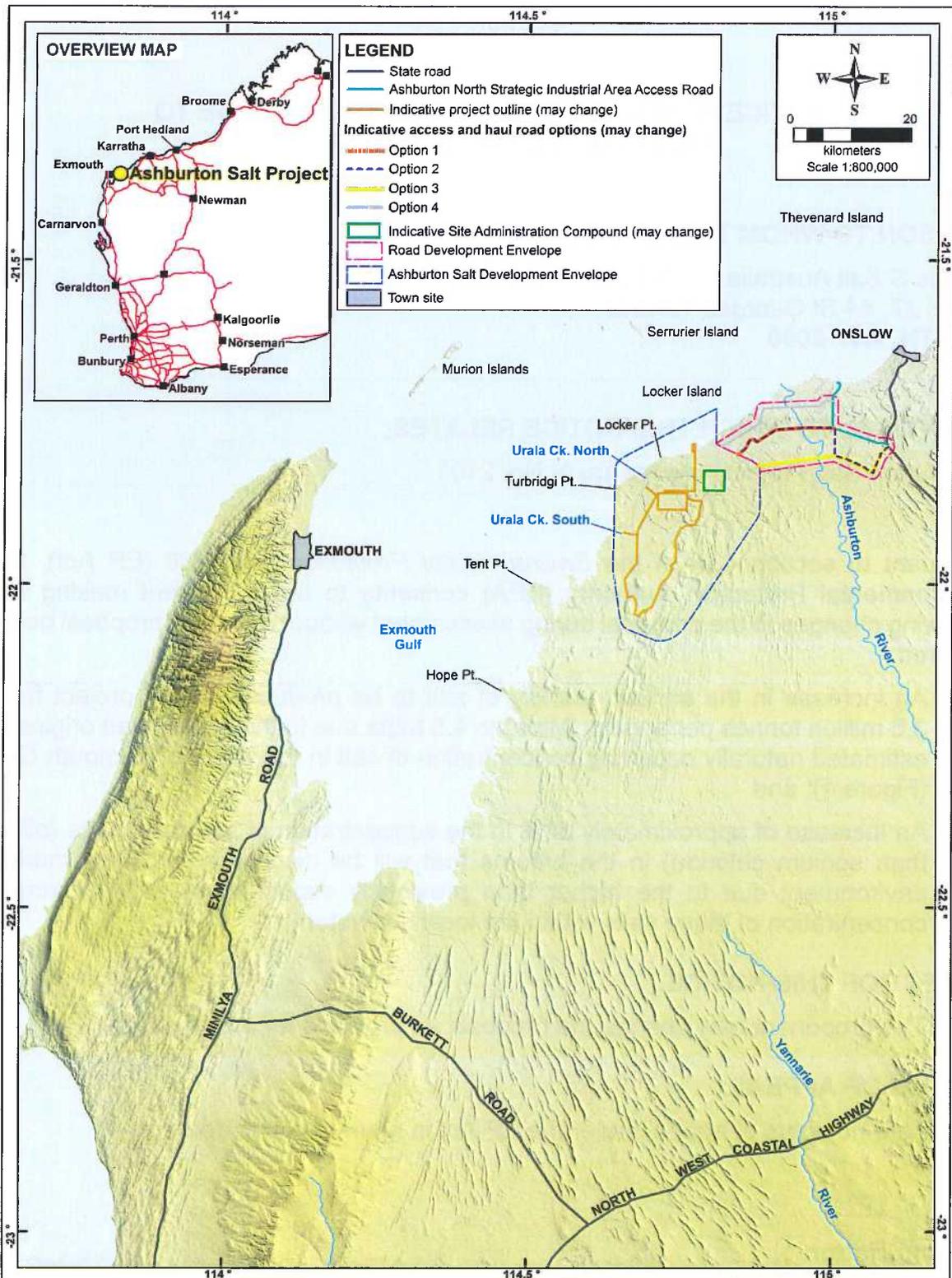


Figure 1:
Ashburton Salt Project
Location

Date: 03/08/2017 Paper: A4 P GDA94
 Data Source: 4A, 4E, 9A, 17A
 File Info: K04_J05_Location_20170803.wor

Figure 1: Regional location

Environmental Protection Act 1986

Section 43A

STATEMENT OF REASONS

CONSENT TO CHANGE PROPOSAL DURING ASSESSMENT

Proposal: Ashburton Salt Project

Proponent: K plus S Salt Australia Pty Ltd

Decision

For the reasons outlined below, the EPA has determined to consent to the Proponent changing the Proposal outlined in the 4th column in Schedule 1, attached to this Statement of Reasons.

Background

On 11 October 2016, K plus S Salt Australia Pty Ltd referred the Proposal to the Environmental Protection Authority (EPA) under section 38 of the *Environmental Protection Act 1986* (EP Act). The Proposal originally included the construction and operation of a 3.5 million tonnes per annum (Mtpa) Solar Salt Project, located approximately 40 kilometres south-west of the town of Onslow in the West Pilbara region of Western Australia.

On 7 November 2016, the EPA determined to assess the Proposal at the level of Public Environmental Review with a 12-week public review period and a proponent prepared Environmental Scoping Document (ESD) with a 2 week public review period.

In July 2017, the proponent submitted an application under section 43A of the EP Act, to make the following changes to the proposal during assessment:

1. Removal of the Haul Road and Wet Weather Access Road depicted to in the referral supporting document and the draft Environmental Scoping Document (ESD) [Refer to the Figure 1 attached].
2. Removal of the Quarry referred to in the referral supporting document and Section 2 in the draft ESD.
3. Addition of a new 24,107 ha Road Development Envelope with a disturbance area of no more than 800 ha (Refer to the Figure 2 attached).
4. Addition of seawater intake of no more than 250 gigalitres per annum as a new operational element for the proposal.

5. Move several items of support infrastructure previously located outside the boundary of the 67,570 ha Ashburton Salt Project Development Envelope so that they are located within the boundary, add a new potable water desalination plant within the boundary, and increase the area of clearing from 17,000 ha to no more than 18,005 ha.
6. Addition of an Indicative Support Infrastructure Compound into the Ashburton Salt Project Development Envelope (Refer to Figure 2 attached).
7. Replace groundwater supply bores with groundwater management / monitoring bores.

On 18 August 2017, the EPA consented to the proponent making the above changes to the proposal during assessment without a revised proposal being referred, pursuant to Section 43 A of the EP Act.

The draft ESD was released for a 2 week public review period which commenced on 18 September 2017 and closed on 3 October 2017. The ESD was approved by the EPA on 24 January 2018.

In advance of the EPA preparing a report on the outcome of its assessment of the Proposal, the Proponent has sought the EPA's consent to the proponent changing the Proposal.

Relevant statutory and administrative provisions

Section 3.8 of the Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2016 guides what information the EPA requires from a person wanting to change its proposal during assessment.

In considering the request for consent, the EPA considered the:

- details of the proposed change;
- statement of the significance of the change; and
- rationale for the change.

Materials considered in making this decision

In determining whether to consent to the proponent changing the proposal the EPA has considered the following:

1. Proposal referral documentation;
2. Public submissions from the 7 day comment period for the referral;
3. Public submissions from the 2 week review period for the draft ESD;
4. The EPA approved ESD;
5. The proponent's request to change the proposal; and
6. Relevant EPA policy and procedures.

Consideration

1. Nature of the proposed change

- a) An increase in the annual quantity of salt to be produced by the project from 3.5 million tonnes per annum (Mtpa) to 4.5 Mtpa due to the higher than originally estimated naturally occurring concentration of salt in the water of Exmouth Gulf

The proponent has undertaken a number of marine water quality related studies required by the approved ESD. The results obtained from studies of water and coral samples from coastal waters in Exmouth Gulf south of Onslow indicate that the seawater salinity nearest to the Ashburton Salt Project site consistently has a higher salt content than originally expected. The higher concentration of salt in the seawater will result in the annual quantity of salt that will be produced by the project increasing from 3.5 Mtpa to 4.5 Mtpa. This change is not considered to be significant as the volume of seawater intake and the volume of wastewater (bitterns) that will be discharged will not increase, and there will be no change to the project footprint and the proposed area of clearing.

- b) An increase of approximately 30% in the concentration of seawater salts (other than sodium chloride) in the bitterns that will be discharged into the marine environment due to the higher than previously expected naturally occurring concentration of these salts within the local seawater

The proponent has not yet determined the exact concentration of the seawater salts (other than sodium chloride) in the bitterns that will be produced and discharged into the marine environment. However, the proponent intends to create and analyse a sample of bitterns from local seawater as part of upcoming studies. This change is not considered to be significant as the proponent will still need to demonstrate via appropriate modelling that the location and configuration of the bitterns discharge pipeline outfall diffuser will produce the required level of dilution and mixing so that compliance with applicable marine water quality criteria can be achieved with the higher concentration of salts (other than sodium chloride) in the bitterns.

2. Stage of the assessment process

The proponent has commenced the environmental studies required by the approved ESD and is currently preparing the draft Environmental Review Document (ERD) for the Ashburton Salt Project. The draft ERD will need to be amended to accommodate the above mentioned changes to the proposal. The ERD will be released for a 12 week public review period.

3. Currency, relevance and reliability of the information, including submissions

EPA Services considers that the currency, relevance and reliability of the information provided in relation to the proposed changes is satisfactory.

4. Community engagement

Three public comments were received in relation to the proponent's referral documentation for the Ashburton Salt Project during the 7 day public comment period which commenced on 13 October 2016 and closed on 19 October 2016. The draft ESD was released for a 2 week public review period which commenced on 18 September 2017 and closed on 3 October 2017. Six submissions were received on the draft ESD. EPA Services considers that this constitutes an adequate level of community engagement.

5. Level of public concern

As indicated above, 3 public comments were received in relation to the proponent's referral documentation for the Ashburton Salt Project during the 7 day public comment period and 6 submissions were received on the draft ESD during the 2 week public review period. The level of public concern regarding the changes to the proposal will only be able to be ascertained once the 12 week public review period for the ERD has been completed. However, EPA Services does not expect a significant level of public concern specifically about the proposed changes to the proposal given that they will not result in an increase in potential environmental impacts.

Consideration of whether the change is unlikely to significantly increase any impact that the proposal may have on the environment

a) Values, sensitivity and the quality of the environment which is likely to be impacted

The proposal is located on the eastern side of Exmouth Gulf within the Exmouth Gulf East Wetland (WA007) which is listed in the *Directory of Important Wetlands in Australia* (ANCA, 1993). The Directory describes the significance of the wetland as "An outstanding example of tidal wetland systems of low coast of northwest Australia, with well-developed tidal creeks, extensive mangrove swamps and broad saline coastal flats."

In August 2011, the then Minister for Environment requested the EPA to provide detailed advice on the conservation values of the East Exmouth Gulf. In February 2012, the EPA provided advice that the environmental values of the area are high and that the area:

- is one of the largest and most extensive, outstanding and intact examples of Western Australian arid zone coastal salt flat ecosystems;
- falls into the category of significant 'wilderness' values attributed to near pristine environments and is currently subject to very limited access;
- is listed in the Directory of important Wetlands (2008) as a wetland of national importance;
- supports extensive adjacent benthic primary producer habitats including mangroves, algal mats, seagrasses, algal beds, and coral communities;
- is a key resting area and important habitat value for humpback whales;

- provides important feeding habitats for other conservation significant species such as marine turtles, dugongs, Australian snub-nose, Indo-Pacific humpback whales, spinner dolphins, sea snakes, sharks (including whale shark) and a diverse range of Indo-West-Pacific affinity species;
- is an important nursery area supporting the prawn and other fisheries in the Gulf;
- provides an internationally significant habitat for migratory shorebirds and waders listed under the under the Japan-Australia Migratory Birds Agreement (JAMBA) and/or the China-Australia Migratory Birds Agreement (CAMBA);
- demonstrates an important marine-estuarine-terrestrial connectivity of the trophic dynamics of the arid tropical system; and
- has been consistently recommended for environmental protection and reservation for conservation purposes in Western Australian and Commonwealth policies and guidelines over many decades.

The EPA approved ESD includes the following preliminary key environmental factors:

- Benthic Communities and Habitat (now Benthic Communities and Habitats);
- Coastal Processes;
- Marine Environmental Quality;
- Marine Fauna;
- Flora and Vegetation;
- Terrestrial environmental Quality;
- Terrestrial Fauna;
- Hydrological Processes;
- Inland Waters Environmental Quality; and
- Social Surroundings.

The proposed changes will not require additional factors to be considered as preliminary key environmental factors for the purposes of preparing the draft ERD. These changes will be identified within the draft ERD which is currently being prepared by the proponent.

b) Extent (intensity, duration, magnitude and geographic footprint) of the likely impacts

The area of the disturbance footprint and the proposed area of clearing for the changed proposal will not change. The volume of seawater intake and the volume of wastewater (bitterns) that will be discharged will not increase. The proponent will still need to demonstrate via appropriate modelling that the location and configuration of the bitterns discharge pipeline outfall diffuser will produce the required level of dilution and mixing so that compliance with applicable marine water quality criteria can be achieved with the higher concentration of salts (other

than sodium chloride) in the bitterns. Accordingly, EPA Services is of the opinion that the proposed change is unlikely to affect the significance and duration of the potential impacts in the context of the entire proposal.

c) Consequence of the likely impacts (or change)

The consequences of the likely impacts of implementing the changes to the proposal are likely to be the same as the original proposal given that:

- the volume of seawater intake and the volume of wastewater (bitterns) that will be discharged will not increase;
- and there will be no change to the project footprint and the proposed area of clearing; and
- the proponent will still need to demonstrate that the configuration of the bitterns discharge pipeline outfall diffuser will produce the required level of dilution and mixing so that compliance with applicable marine water quality criteria can be achieved with the higher concentration of salts (other than sodium chloride) in the bitterns.

d) Resilience of the environment to cope with the impacts or change

EPA Services considers that the resilience of the environment to cope with the impacts from the changed proposal remains unchanged from that of the original proposal, should it be implemented.

e) Cumulative impacts with other projects

Cumulative impacts will be considered in the EPA's assessment of the changed proposal. The proposed changes are unlikely to affect the cumulative impact of the proposal at a local or regional scale.

f) Connections and interactions between parts of the environment to inform holistic view of impacts of the whole environment

The impact to the environmental functions and values of the proposal area is unlikely to change as a result of the changed proposal being implemented instead of the original proposal. A holistic assessment of the changed proposal will be undertaken during the EPA's assessment of the proposal.

g) Level of confidence in the prediction of impacts and the success of proposed mitigation

There is no change to the level of confidence in the prediction of impacts and the success of the proposed mitigation.

h) Public interest about the likely effect of the proposal, if implemented, on the environment, and public information that informs the EPA's assessment

Three comments were received during the seven day public comment period following the referral of the proposal to the EPA. All three comments indicated that the preferred level of assessment for the proposal is PER.

Key issues raised by the public included the following:

- the poor level of detail on the strategy for the discharge and dilution of bitterns and the need for, and required volume of, dredging and spoil disposal;
- the lack of contemporary environmental data for the area north of the Yannarie Solar Salt Project area and the high number of environmental factors at risk;
- impacts to biodiversity, wetland ecosystem, benthic primary producer habitat, mangroves, algal mats, inshore prawn nursery grounds, and other aquatic species;
- the need for new environmental surveys to be undertaken given the age of surveys referred to in the referral documentation that were undertaken for the Yannarie Solar Salt Project;
- the lack of information on proposed mitigation actions; and
- the lack of consideration given to cumulative environmental impacts.

Six submissions were received on the draft ESD. The key issues raised in the submissions include:

- impacts from the intake of seawater and the discharge of bitterns on benthic communities and habitats (including prawn nursery habitat), marine environmental quality, marine fauna, and commercial and recreational fishing activities;
- impacts from shipping and dredging activities and Introduced Marine Pests (IMPs) on marine fauna, especially conservation significant species, and prawns, oysters, and fish species listed under the *Fish Resources Management Act 1994* (FRMA) which are important to commercial and recreational fishers;
- impacts from sea level rise and the need for investigations into safe decommissioning if sea level rise threatens the integrity of the ponds;
- the need for a current baseline survey of flora and vegetation to be completed which incorporates seasonal variation and accurately reflects the natural environment, and for flora and vegetation surveys to include consideration of recent natural events so that the data does not misrepresent the species present;
- the need for accurate baseline terrestrial fauna surveys to be undertaken which incorporate the seasonal variation of migratory animals, and for all terrestrial fauna surveys to consider whether the environment is recovering from a natural event;
- the need for the ESD to include an investigation into freshwater and nutrient flows into Exmouth Gulf due to high rainfall events, storm surge, and possible

tsunami events, and to address the potential adverse impacts to the environment; and

- the need for the draft ESD to include baseline research into the presence of Naturally Occurring Radioactive Materials (NORMS) within the Development Envelopes and address the impact of NORMS if found and disturbed during construction or operation.

EPA Services is of the opinion that public interest in the proposal will likely remain about the same regardless of the proposed changes.

Schedule 1

Change to Proposal*

Table 1: Location and proposed extent of physical and operational elements

Element	Indicative location	Original Proposal Extent	Changed Proposal Extent (s43A)
Physical elements			
Evaporation and crystallisation ponds	Figure 1 (indicative layout may change)	Clearing of no more than 15,000 ha within a 67,570 ha Ashburton Salt Project Development Envelope	No change
Support infrastructure	Figure 1 (indicative layout may change)	Clearing of no more than 3,005 ha within a 67,570 ha Ashburton Salt Project Development Envelope (includes: seawater intake pumps/channel/pipeline(s); internal site roads; electricity generation and reticulation; fuel storage sites; a jetty and product loading facilities; dredging; land based dredge spoil disposal; a salt wash plant and associated ponds; salt stockpiles and conveyors; onsite buildings such as offices, storage, workshops and accommodation; sewage treatment facilities; landfill; water management/monitoring bore(s); equipment parking and laydown areas; bitterns discharge infrastructure which may include a channel, dilution pond, pipeline and diffuser; drainage diversion(s); borrow pits; airstrip and/or helipad; and desalination plant.)	No change
Access/haul road (including road upgrades and river crossing/bridge), service corridor and borrow pits	Figure 1 (indicative road alignment options may change)	Clearing of no more than 800 ha within a 24,107 ha Road Development Envelope	No change
Operational elements			
Seawater intake	Figure 1 (indicative locations of seawater intake options may change)	Seawater intake of no more than 250 GL per annum	No change
Salt production wastewater (bitterns)	Figure 1 (indicative location of bitterns discharge pipeline may change)	Marine discharge of no more than 10 GL per annum (Note: 10 GL is a pre-diluted volume, if dilution is required the volume would increase accordingly)	No change

*A new table will be developed to align the changed proposal description with Instruction: Key Proposal Characteristics. The Key Characteristics table derived from the proponent's s43A request, has been used to illustrate the changes as compared to the original proposal. As such, this table will be subject to change during the assessment process.