

# **Decision Document**

#### Environmental Protection Act 1986, Part V

Proponent:	Dampier Salt Limited
Licence:	L7183/1997/11

Registered office:	37 Belmont Avenue BELMONT WA 6104
ACN:	008 706 590
Premises address:	Port Hedland Operations ML242SA, ML250SA and M269SA PORT HEDLAND WA 6721
Issue date:	Thursday, 12 September 2013
Commencement date:	Sunday, 22 September 2013
Expiry date:	Friday, 21 September 2018

#### Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by:

Christine Pustkuchen Licensing Officer

Decision Document authorised by:

Danielle Eyre Delegated Officer



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### **1** Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986.* Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

### 2 Administrative summary

Administrative details				
Application type	Works Ap New Licer Licence a Works Ap	nce mendmen	-	
Activities that cause the premises to become	Category		-	Assessed design capacity
prescribed premises	14 – Solar salt manufacturing: premises on which salt is produced by solar evaporation.			3 200 000 tonnes per annual period.
Application verified	Date: N/A			
Application fee paid	Date: N/A			
Works Approval has been complied with	Yes	No	N/A	
Compliance Certificate received	Yes	No	N/A🖂	
Commercial-in-confidence claim	Yes	No⊠		
Commercial-in-confidence claim outcome				
Is the proposal a Major Resource Project?	Yes	No⊠	1	
Was the proposal referred to the Environmental			Referral de	cision No:
Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes⊠	No⊠	Managed under Part V	
	ļ A		Assessed under Part IV 🛛	
			Ministerial statement No: 147	
Is the proposal subject to Ministerial Conditions?	Yes⊠	No	EPA Repor	t No:



Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes  No⊠ Department of Water consulted Yes
Is the Premises within an Environmental Protection	Policy (EPP) Area Yes□ No⊠
Is the Premises subject to any EPP requirements?	Yes⊡ No⊠

#### 3 Executive summary of proposal and assessment

Dampier Salt Limited (DSL) Port Hedland Operations produces halite salt (sodium chloride) by solar evaporation of seawater. The Port Hedland Operations are located in the north-west of Western Australia within the municipality of the Town of Port Hedland.

The process of producing salt begins at seawater pump stations. Seawater is pumped from adjacent tidal creeks during high tides into a series of concentrator ponds located approximately 40 kilometres (km) north of Port Hedland. The seawater is gravity fed from concentrator pond zero through the last concentrator pond eight. Solar energy and wind evaporate the seawater, which progressively concentrates the seawater into a hyper-saline brine solution. The brine is then pumped from the last concentration pond through a 21km ditch system to a flow equalisation pond where the brine is further evaporated.

Saturated brine is pumped, as required into crystallising ponds where further evaporation causes the salt to crystallise. Once the saturated brine in the crystallisers has reached a certain concentration the residual brine, now called bitterns is drained off. When the salt has grown to the required thickness it is removed by mechanical harvesters. Generally each crystalliser is harvested once per year. The harvester feeds a prime mover, which consists of 2 to 3 belly dumpers.

Following harvest the salt is transported directly to the wash plant for removal of gypsum and other impurities. The washed salt is left to drain and dry, to meet the required moisture content. Dry salt is then trucked to the Port Operations (licensed under L7179/1997/11) and stockpiled. The gypsum that is recovered during the washing process or removed from ponds and channels is utilised for repairs to roads and levees or used to backfill borrow pits to facilitate rehabilitation works.

The bitterns are released through either Six Mile Creek or Paradise Creek discharge points and are discharged to avoid significant environmental harm in accordance with the DSL internal Environmental Discharge Procedure (JA-PRO-760) and Ministerial Statement 147.

This decision document is a result of an amendment request made by the Licensee to amend the reporting date for the submission of the Annual Environmental Report (AER) from 28 February to 30 April. At the time of this amendment, minor changes were also made to align the Licence with version 2.9. DER has not re-assessed the acceptability of impacts of emissions and discharges from the Premises or re-visited any existing emission control levels.



#### 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1 – 1.2.3	Generic changes have been made to the General Conditions as part of DER reform and updates to licence templates. These changes include removing conditions referencing the Code of Practice for the Storage and handling of dangerous goods and referring to environmentally hazardous materials. No other changes have been applied to this section. Other general changes have been made to the licence to update it to the current template version. These changes include removing reference to targets and 'no specified conditions' statements and the term director.	N/A.
Premises operation	L – no conditions	Previous condition 1.3.1 for the soil bioremediation facility has been removed as this is a secondary activity, which does not contribute to the nature and type of emissions from the primary activity. This is in accordance with the DERs guidance statement <i>Licencing and works approvals process</i> , <i>September 2015</i> .	General provisions of the Environmental Protection Act 1986. Environmental Protection (Unauthorised Discharges) Regulations 2004. Department of Environment Regulation, Guidance statement Licencing and works approvals process, September 2015
Fugitive emissions	L – no conditions	Emission Description Emission: Dust generated by heavy vehicle movement on haul roads and stockpile area. The main source of dust is from heavy vehicles operating on haul roads, including the stockpile area which is managed by watering	General provisions of the <i>Environmental Protection Act</i> 1986.



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		with brine on a regular basis <i>Impact:</i> Dust coating vegetation causing vegetation death and health impacts on nearby sensitive receptors. <i>Controls:</i> Minimal dust is produced as a result of salt production. Spraying with brine solution creates a hard seal on the surface to enhance dust suppression. Salt stockpiles do not generate dust.	Environmental Protection (Unauthorised Discharges) Regulations 2004.
		Risk Assessment Consequence: Insignificant Likelihood: Rare Risk Rating: Low	
		Regulatory Controls Condition 2.6.1 has been removed from the licence as the environmental/health risk of dust emissions associated with the premises is low. General provisions of the <i>Environmental Protection Act 1986</i> and the <i>Environmental Protection (Unauthorised Discharges) Regulations</i> 2004 apply.	
		Residual Risk Consequence: Insignificant Likelihood: Rare Risk Rating: Low	
Information	4.2	As part of this amendment the reporting date for the submission of the Annual Environmental Report has been changed from 28 February to 30 April. This will allow sufficient time for the incorporation of information from external consultant reports for the AER and will align this licence with Dampier Salts other DER licences.	Information
		Generic changes have also been made to the Information conditions as part of DER reform and updates to licence templates. These changes include removing a condition requiring the licensee to notify DER in the	

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		event of any failure or malfunction of pollution control equipment or any incident. This is already covered by s72 of the EP Act.	

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#### **5** Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into
			consideration
7/01/2016	Proponent sent a copy of draft instrument	No comments received	N/A

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#### 6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1	:	Emissions	Risk	Matrix
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Likelihood	Consequence						
	Insignificant	Insignificant Minor Moderate Major Severe					
Almost Certain	Moderate	High	High	Extreme	Extreme		
Likely	Moderate	Moderate	High	High	Extreme		
Possible	Low	Moderate	Moderate	High	Extreme		
Unlikely	Low	Moderate	Moderate	Moderate	High		
Rare	Low	Low	Moderate	Moderate	High		