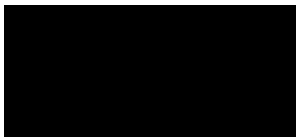




Licence Number	L7182/1997/11
Licence Holder	Dampier Salt Limited
ACN	008 706 590
File Number:	DER2014/000643-1
Premises	Dampier Operations - ML253SA Dampier Highway DAMPIER WA 6713
Date of Amendment	14 November 2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.



Clarrie Green

A/Manager, Licensing (Resource Industries)

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Notice	refers to this document
ANZECC	Australian New Zealand Guidelines for fresh and marine water quality 2000
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
Categories	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
Existing Licence	the Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Dampier Salt Limited
mg/L	milligrams per litre
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
TRH	total recoverable hydrocarbons
µg/L	micrograms per litre

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an application received by the Department of Water and Environmental Regulation (DWER) on the 21 of June 2018 to include on the licence an additional discharge point identified as W3e located on East Mid Intercourse Island, discharging wastewater from wash down activities during the operation of the conveyor belt to Mermaid Strait.

The application is in response to the 2016 target inspection report to review the installation of sufficient operational controls to manage unauthorised contaminated waste wash down water from conveyor transfer points. The report indicated that the existing discharge point W3e was not referenced or included in the Existing Licence.

This amendment applies to Category 14 and no changes to the aspects of the Existing Licence relating to Category 58A have been requested by the Licence Holder. This amendment will assess the overall risk to the identified receptors associated with all conveyor transfer discharge points to Mermaid Strait. There are no changes to the throughputs or prescribed activities as a result of this amendment.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Discharge monitoring

Laboratory results from samples taken on the 1 May 2018 indicated emission points W2a, W3a, W3b, W3c, W3d and W3e all had concentrations of Benzene, Toluene, Ethylbenzene less than the reporting limit of 0.001 mg/L and Xylenes less than the reporting limit of 0.003 mg/L (BTEX). Therefore current total concentrations of BTEX at each discharge point are below the Existing Licence limit of 10 µg/L.

The majority of Total Recoverable Hydrocarbon (TRH) concentrations for W2a, W3a, W3b, W3c, and W3d did not exceed the limit of reporting (0.04 mg/L) with the maximum concentrations reaching 0.82 mg/L at emission point W2a. Emission point W3e, relevant to this amendment, had concentrations of TRH below the limit of reporting. All emission sources had TRH concentrations well below the Existing Licence limit of 15 mg/L.

The Annual Environmental Report 2017 indicated no exceedances of BTEX or TRH with concentrations well below the limits set in condition 2.2.2 of the Existing Licence indicating consistent water quality discharges.

Amendment history

Table 2 provides the amendment history for L7182/1997/11 since 2013.

Table 2: Licence amendments

Instrument	Issued	Amendment
L7182/1997/11	7/1/2016	Amendment Notice 1

		to increase the premises production capacity or design capacity and to remove a discharge point that has been converted to a containment pond
L7182/1997/11	12/9/2013	Licence reissue and format conversion.

Location and receptors

Table 3 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 3: Receptors and distance from activity boundary

Sensitive receptors	Distance from Prescribed Premises
Human Receptor	Emission Point W3e is located on East Mid Intercourse Island and is 4.5 km north west of Dampier Residential Area and approximately 2 km from a popular recreational boating area, blocked off by a causeway to East Intercourse Island.
Marine Environment The environment surrounding discharge points can be described as moderately disturbed under ANZECC Guidelines.	Direct Discharge to ocean from East Mid Intercourse Island.
Flatback turtle	Flatback turtles are known to visit the area but have not been sited on East Mid Intercourse Island where W3e is located.

Risk assessment

Table 4 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 4: Risk assessment for proposed amendments during operation

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Cat 14 Solar salt manufacturing: premises on which salt is produced by solar evaporation	Conveyor transfer discharge points to Mermaid Strait	Discharge to water Wastewater discharged to the marine environment associated with wash down water potentially contaminated with BTEX and TRH	Marine Environment	Direct discharge	Reducing the water quality resulting in adverse impacts to the health and survival of marine flora and fauna	Minor	Unlikely	Medium	<p>On and off-site impacts on a local scale are minimal with wider scale impacts not detectable giving a consequence rating of <i>minor</i>.</p> <p>It is a low likelihood that the concentrations of TRH and BTEX will be noticeable as a visible film on the water or be detectable by odour.</p> <p>Oily water separators (triple interceptors) are installed at each emission point designed to remove hydrocarbons prior to discharge. It is <i>unlikely</i> that TRH concentrations will impact the marine environment (ANZECC 2000).</p> <p>Quarterly monitoring indicates that discharge concentrations are likely to remain below the reportable limit of 15 mg/L for TRH and 10 µg/L for BTEX in most circumstances.</p> <p>The risk has therefore been assessed as Medium based on the implementation of Licence Holder controls.</p>
		Human Receptors	No pathway	No impacts	Not assessed	Not assessed	Not assessed	Not assessed	The impacts to human receptors are not anticipated due to the two rock groyne barriers that separate the discharge point from the recreational boating area. Recreational boats may access the area near to the discharge point although boats are likely to avoid the area due to industrial activity.

Decision

The Delegated Officer has determined that the inclusion of the existing emission point W3e into the authorised emission points does not change the risk associated with existing operations. Wash water discharges have been assessed as a medium risk to environmental receptors due to the minor consequence associated with low concentrations of hydrocarbons (below Existing Licence limits) being discharged into the marine environment and low likelihood based on existing controls implemented by the Licence Holder being conditioned through this Amendment Notice.

Oily water separators are installed on all emission point sources discharging to the marine environment. The Licence Holder is required to operate and maintain all pollution control and monitoring equipment in accordance with the manufacturer's specifications. The Licence Holder must not cause or allow point source emissions to surface water, namely TRH and BTEX to exceed the limits set in the Existing Licence.

Quarterly monitoring at discharge points will continue to form a requirement of the Licence to ensure regulatory oversight.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 4 October 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. Condition 2.2.1 of the Licence is amended by the insertion of the underlined text and deletion of text shown in strikethrough shown below:
 - 2.2.1 The Licensee shall ensure that where waste is emitted to ~~surface water~~ the marine environment from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Emission point reference and location on Map of emission points	Emission point reference on Map of emission points	Description	Source
W1	Bitterns discharge channel to Nickol Bay	Bitterns discharge channel	Bitterns
W2	Mistaken Island wash bay pond discharge to Mermaid Strait	Wastewater discharge points	Wastewater potentially contaminated with hydrocarbons
W3a, W3b, W3c, W3d, <u>W3e</u>	Conveyor transfer discharge points to Mermaid Strait	Discharge of washdown water	Waste water potentially contaminated with Hydrocarbons

2. Condition 2.2.2 of the Licence is amended by the insertion of the underlined text and deletion of text shown in strikethrough shown below:

2.2.2 The Licence Holder shall not cause or allow point source emissions to ~~surface-water~~ the marine environment greater than the limits listed in Table 2.2.2

Table 2.2.2: Point source emission limits to surface-water <u>the marine environment</u>			
Emission point reference	Parameter	Limit (including units)	Averaging period
W2, W3a, W3b, W3c, W3d, <u>W3e</u>	TRH	15 mg/L	Spot Sample
	BTEX	10 µg/L	

3. Condition 2.2.3 of the Licence is amended by the insertion of the underlined text shown below:

2.2.3 All emission points listed in Table 2.2.2 must pass through an oily water separator prior to discharge to the marine environment.

4. Condition 3.2.1 of the Licence is amended by the insertion of the underlined text shown below:

3.2.1 The Licence Holder shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to surface-water <u>the marine environment</u>			
Emission point reference	Parameter	Units	Frequency
W1	Volume	L/s M ³ /day	Monthly cumulative
	Chloride, sulphate, sodium, magnesium, potassium, Calcium, TSS, arsenic, beryllium, boron, cadmium, chromium, copper, fluoride, lead, mercury, nickel, Total nitrogen, Total phosphorus	Mg/L	Six monthly
	Electrical Conductivity	µs/cm	
	pH ¹	pH units	
W2, W3a, W3b, W3c, W3d, <u>W3e</u>	TRH	mg/L	Quarterly
	BTEX	µg/L	

Note 1: In-field non-NATA accredited analysis permitted.

5. The map of emission points in Schedule 1 is replaced by the figures below:

Map of emission points

The locations of emission points defined in Tables 2.3.1 and 2.5.1 are shown below.



Figure 1: Bitterns channel discharge point to Nickol Bay



Figure 2: Mistaken Island and East Mid Intercourse Island discharge points

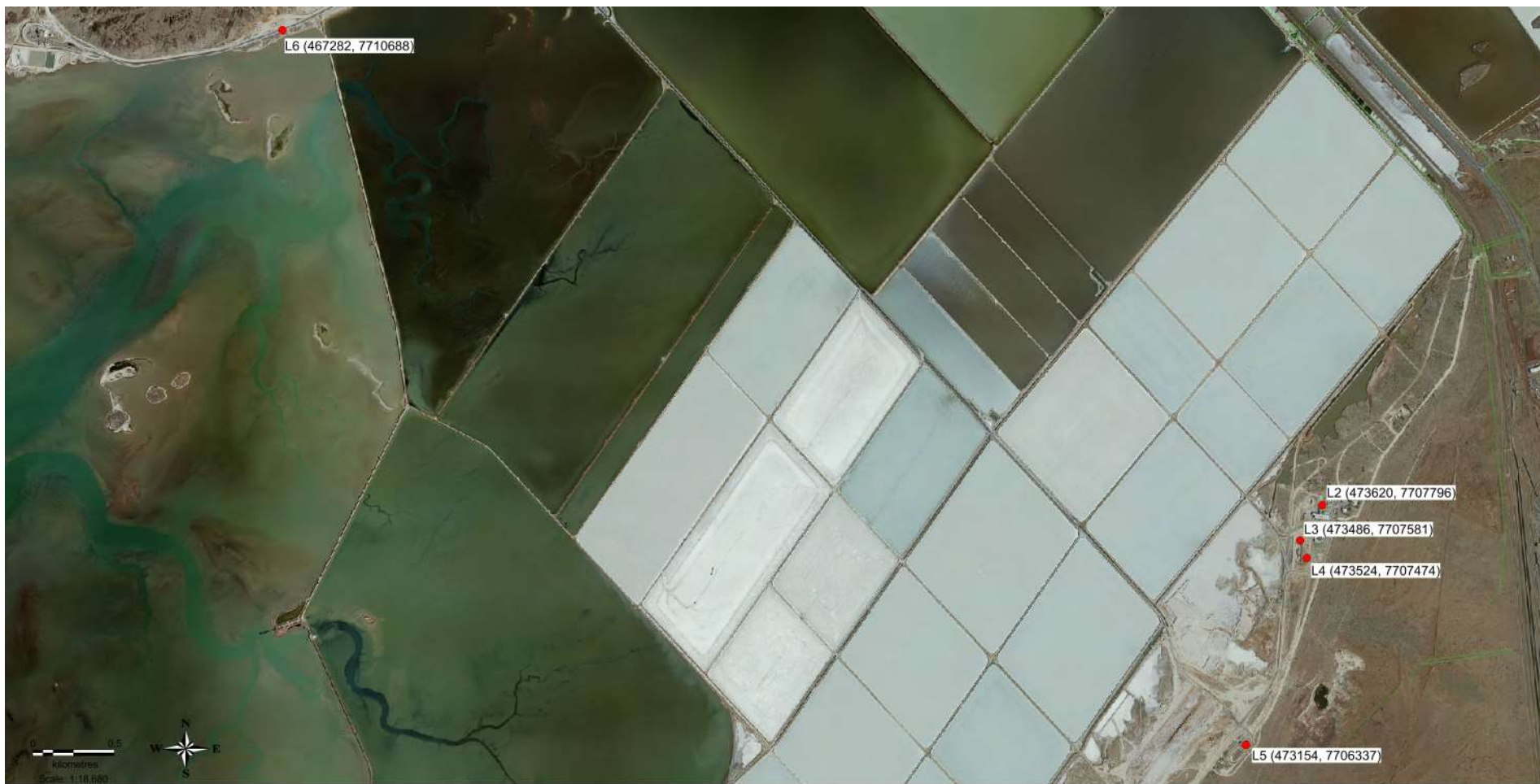


Figure 3: Discharge points to unlined evaporation ponds

Appendix 1: Key documents

	Document title		Availability
1	Licence L7182/1997/11 Targeted Inspection Report Dampier Salt Limited – Dampier Operations	Inspection Report 2016	DWER records (A1678082)
2	Licence L7182/1997/11 Inspection Letter Dampier Salt		DWER records (A1702566)
3	L7182 Dampier Salt Limited Dampier Operations Annual Environmental Reports 2017	AER 2017	DWER records (A1663206)
4	2018 Q2 Emissions monitoring results	ARL 2018	DWER records (A1695583)
5	ANZECC Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Volume 1 The Guidelines 2000	ANZECC 2000	Accessed at http://www.waterquality.gov.au
4	DER, July 2015. <i>Guidance Statement: Regulatory principles.</i> Department of Environment Regulation, Perth.	Accessed at www.dwer.wa.gov.au	
5	DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.		
6	DER, February 2017. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.		
7	DER, February 2017. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.		
9	DER, November 2016. <i>Guidance Statement: Environmental Siting</i> Department of Environment Regulation, Perth		

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 4 October 2018 for review and comment. The Licence Holder responded on 9 October 2018 the following comments were received on the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DWER response
Table 2.2.1	The Licence Holder requests that emission point W3 is removed from Table 2.2.1 it is not an existing emission point. The spelling of Nickol Bay is to be amended.	Noted. W3 emission point has been removed from table 2.2.1. Nickol Bay has been amended with the correct spelling.
Table 2.2.2	The Licence Holder requests that emission point W3 is removed from table 2.2.2.	Noted. W3 emission point has been removed from table 2.2.2 and replaced with W2 as per Existing Licence.
2.2.3	The Licence Holder requests that emission points W2 and W3 (a,b,c,d,e) discharges must receive pollution control treatment prior to discharge to the marine environment.	Noted. Condition 2.2.3 has been amended to state: <i>All emission points listed in Table 2.2.2 must pass through an oily water separator prior to discharge to the marine environment.</i>
Table 3.2.1	The Licence Holder has requested the removal of emission point W3 from table 3.2.1. The frequency of emission point W1 is to be amended to six monthly as per the conditions of the current licence.	Noted. Emission point W3 has been removed from table 3.2.1. The frequency of monitoring at W1 has been amended to align with the Existing Licence.