

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number	L7183/1997/11
Licence Holder	Dampier Salt Limited
ACN	008 706 590
File Number	DER2014/000086-1
Premises	Dampier Salt Port Hedland Operations
	Legal description –
	ML242SA, ML250SA, M269SA, L45/00220, L45/00315 L45/00370, AM70/00269, AML70/00242 and AML70/00250
	As defined by the Premises maps attached to the Revised Licence
Date of Report	9 February 2024
Decision	Revised licence granted

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

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1. Decision summary

Licence L7183/1997/11 is held by Dampier Salt Limited (Licence Holder) for the Port Hedland Operations (the Premises), located at mining tenements ML242SA, ML250SA and M269SA Port Hedland.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L7183/1997/11 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 6 January 2023, the Licence Holder submitted an application to the department to amend Licence L7183/1997/11 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Extend the premises boundary to include tenements AM70/00269, AML70/00242 and AML70/00250; and
- Increase the salt manufacturing from 3,200,000 to 4,000,000 tonnes per annum.

The licence holder has requested an increase in the solar salt manufacturing due to the fluctuations in throughput that can be attributed to the impact of weather conditions on salt manufacturing (evaporation) which can result in variable amounts of salt volumes annually. The increase to the production / design capacity allows flexibility for favourable salt manufacturing conditions.

2.2.1 Existing Licence Operations

Dampier Salt Limited Port Hedland Operations produces halite salt (sodium chloride) by solar evaporation of seawater.

The process of producing salt begins at seawater pump stations. Seawater is pumped from adjacent tidal creeks (Ridley Creek) during high tides into a series of concentrator ponds located approximately 40 kilometres north of Port Hedland. The seawater is gravity fed from concentrator pond zero by two intake pump stations site on adjacent tidal creeks, through to the last concentrator pond eight. Eight diesel-driven pumps are employed with a combined pumping capacity of 16m³/s. A series of eight primary concentration ponds occurring approximately 6,000 ha are located approximately 30 km east of Port Hedland.

Solar energy and wind evaporate the seawater, which progressively concentrates the seawater into a hypersaline solution called brine. The brine is then pumped from the last concentrator pond through a 21 km ditch system to a flow equalisation pond where 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. Bitterns are collected in desalting or bitterns ponds before being discharged during high tides into 6 Mile Creek and Paradise Creek. The discharge of bitterns is discharged once a fortnight over a two-to-three-day period. This period is coincident with high tidal ranges (high tides exceeding 5.6 m) to ensure maximum flushing and dispersal of bitterns from tidal creeks into the nearshore ocean environment. The bitterns are released through either Six Mile Creek or Paradise Creek discharge points and must be discharged to avoid significant environmental harm is accordance and DSL internal Environmental Discharge Procedure (JA-PRO-760) and Ministerial Statement 147.

When the salt has grown to the required thickness it is removed by mechanical harvesters. Generally, each crystallisers is harvested once per year. The harvester feeds a prime mover, which consists of 2 to 3 belly dumpers.

Following the 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 Operation (licensed under L7179/1997/11) and stockpiled. The gypsum that is recovered during the washing process or removed from the ponds and channels is utilised for repairs to roads and levees or used to backfill borrow pits to facilitate rehabilitation works.

Current infrastructure:

There are currently nine concentrator ponds with each pond operates to a target depth of 0.5 - 1.0 metre. The size of the ponds is as follows:

- Pond 0: 1,639 hectares
- Pond 1: 1,225 hectares
- Pond 2: 1,141 hectares
- Pond 3: 797 hectares
- Pond 4: 629 hectares
- Pond 5: 642 hectares
- Pond 6: 411 hectares
- Pond 7: 381 hectares
- Pond 8: 447 hectares

The total productive concentrating ponds area is 7,713 hectares.

Capacity of the flow equalisation pond:

• Pond 9: 401 hectares with a target depth of 0.5 – 1.0 metre depth.

Capacity of crystallising field:

 Total productive area of 30 crystalliser ponds is 1,070 hectares with a target depth of 0.2 – 0.5 metres of brine.

The Licence Holder has not amended, and is not applying to amend the size or target depths of the crystallisers or ponds.

This amendment is limited only to changes to Category 14 activities from the Existing Licence.

Table 1 below outlines the proposed changes to the existing Licence.

Category	Current throughpu capacity	t Proposed throughput capacity	Description of proposed amendment
14	3,200,000	4,000,000	Fluctuations in the production of salt can be attributed to the impact of weather conditions (evaporation). The increase in throughput capacity allows for flexibility for favourable salt manufacturing conditions.

Table 1: Proposed design or throughput capacity changes

2.3 Part IV of the EP Act

The 'Leslie Salt Project, Expansion of Ponds, Port Hedland' was assessed by the Environmental Protection Authority (EPA) under Part IV of the EP Act and Ministerial Statement (MS) 147 was granted 21 June 1991. There have been four amendments to MS 147 since being granted. The current throughput for salt production authorised under MS 147 is 3.2 million tonnes per annum (Mtpa).

In considering the potential direct and indirect impacts of the original Part IV proposal on flora and vegetation, terrestrial fauna, subterranean fauna and social surrounding, the EPA had regard to the following:

- Biological characteristics: tidal creek / mangrove assemblage, salt / mud tidal flat assemblage and low shrubland /grassland assemblage.
- Social characteristics: Port Hedland.
- Environmental effects including physical effects (flood waters to Tabba Tabba Creek).
- Biological effects salt / mud tidal flats, tidal creek and fringing mangroves, sand plain and associated grassland / shrublands.
- Social effects.

Dampier Salt Limited requested an amendment of MS 147 under section 45c of the EP Act on 30 September 2022. The amendment was to remove the 3.2 Mtpa salt production limit from Schedule 1 of Attachment 4 of MS 147, as it would be regulated under the Licence required by Part V of the EP Act.

On the 21 December 2022, the EPA Chair approved the amendment and issued Attachment 5 to MS 147. The attachment can be viewed on the EPA website.

EPA Services reviewed the amendment to the premises boundary and advised Industry Regulation on 3 October 2023 that amendment can proceed based on the indicative boundary provided by the licence holder.

In accordance with section 57(4)(b) of the EP Act, the CEO cannot issue licence that is "contrary to, or otherwise than in accordance with, an implementation agreement or decision". The Part V assessment process will not duplicate matters already addressed under the Part IV process. The licence amendment cannot be granted until a decision under Part IV has been made.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk*

assessments (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Hold	er controls
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Emission	Sources	Potential pathways	Proposed controls			
Dust	Vehicle movement, operation of salt wash plant, evaporation ponds, salt stockpiles.	Air/windborne pathway	No additional controls proposed.			
Noise	Intake pumping	Air/windborne pathway	No additional controls proposed.			
Brine	Intake pumping, evaporation ponds, salt stockpiles, crystalliser ponds.	Seepage through base and embankment of ponds and stockpiles.	No additional controls proposed. Existing controls include: Pond levees were originally constructed on mud flats using in-situ material with subsequent layers of limestone rock battering and pindan clay core that acts as a seepage control. Seepage is minimised by the low elevation above sea level and water table as well as the active biological system in the salt field, generally consisting of a living microbial community on the floors of the early concentration ponds. This microbial community can be in the form of a continuous carpet that causes an effective reduction in the quality of brine that may be lost from the pond rough seepage. Biennial groundwater monitoring at site includes testing for salinity. Levee batters are rock armoured across the operation on a risk-based approach. The batters of the crystalliser levees are constructed with a further 800mm thick salt			
Brine	Intake pumping, evaporation ponds, salt stockpiles,	Unintentional discharge through spills /	No additional controls proposed. Existing controls include:			

Emission	Sources	Potential pathways	Proposed controls
	crystalliser ponds.	leaks or	Controls to detect leaks:
		pipeline rupture or overtopping.	Alarms and monitoring equipment are set up at discharge gates at Six Mile and Paradise Creek as well as intakes and other major pump stations.
			Regular maintenance inspections take place to ensure the infrastructure is operating as it should.
			Visual checks are made to ensure discharge gates are closed properly after each bitterns discharge.
			Controls for overtopping:
			Surface water studies have been carried out to date, and have concluded the following estimated values for heavy rainfall:
			• 1/50 years / 72hrs =441.4mm
			• 1/100 years / 72 = 536.4mm
			Based on the above rainfall values, it is estimated that a 50 year event, could cause pond water levels to increase by approximately 441.44mm and a 100 year event by approximately 536.4mm respectively from rainfall alone.
			In the event of heavy rainfall, the crystalliser ponds have the capacity to balance amongst the field of ponds (noting some ponds have the capacity to receive additional water up to one metre before reaching levels capable of overflowing.)
			Monitoring of levels is completed on a weekly basis with operators completing gauge readings in all ponds and crystallisers:
			 Gauges are surveyed and high- level set points are determined by the surrounding infrastructure.
			 When levels rise or there is a reduced freeboard capacity, changes are made to the pumping rates or sluice gates to correct.
			• Due to the large area for operations, changes in level changes are slow allowing adequate time to respond.
			• In the crystalliser field there are a number of high-level switches in the brine delivery channels which interlock with the pumps to maintain levels in the channels.

Emission	Sources	Potential pathways	Proposed controls		
Bitterns	Intake pumping, evaporation ponds,	Discharge to Six Mile Creek	No additional controls proposed. Existing controls include:		
	salt stockpiles, crystalliser ponds.	and Paradise creek.	The discharge point monitoring regimes are laid out in the Port Hedland Solar Fields Bitterns Management and Monitoring Plan (BMMP). The BMMP provides an overarching direction for the effective management of bitterns discharge from the Dampier Salt Limited Port Hedland operation. More specifically:		
			 Bitterns to be discharged during the defined parameters within tidal windows and within the annual volume cap that have been demonstrated to have had no measurable impact on the environment. 		
			Records maintained:		
			 Time and date of bitterns discharge gates open and close per tide event 		
			 Height of tide at each open and close of the discharge gates 		
			 Discharge volume and location 		
			Monitoring conducted:		
			 Regular sampling to measure quality. 		
			Regular inspections of discharge gates and for possible adverse environmenta conditions.		
			Existing licence L7183/1997/11 requires the applicant to only discharge bitterns to surface water at the Six Mile Creek and Paradise Creek bitterns discharge points No additional regulatory controls are required under the Part V licence as bittern are regulated through Part IV of the EP Act As a result, bitterns are not considered further in this risk assessment.		
Brine / Bitterns	Storage ponds	Stormwater contamination from	No additional controls proposed. Existing controls include:		
		overtopping of ponds during significant rainfall events.	Stormwater and sediment control Procedures are in place describing measures to be taken in the event or unforeseen or forecast significant rainfall (e.g. tropical low or cyclone) and the actions to be implemented post significant rainfall.		

Emission	Sources	ources Potential Proposed controls pathways			
			Responses depend on the classification of a rainfall event (minor / moderate / significant) and include switching off pump stations and transfer pumps, deploying mobile pumps where required, opening / closing gates as required and flooding empty ponds.		

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity			
Closest residential receptor	1km from northern edge of the premises boundary (on the western border)			
Tjalka Wara (Aboriginal Community)	4.8 km south of the premises boundary			
Environmental receptors	Distance from prescribed activity			
Leslie (Port Hedland) Saltfields system	Within premises boundary			
 Threatened fauna (numerous) 32 listed Threatened Species 59 Migratory Species 94 listed Marine Species 13 Whales and other Cetaceans 1 Habitat Critical of the Survival of Marine turtles 	Within 500m of premises boundary			
Flora	Within 1km of the premises boundary			
No threatened flora.				
Mangrove species Avicennia marina and Ceriops tagal and Rhizophora stylosa, samphires include Halosarcia spp.	*Note: Assessed under MS 147, removed from risk assessment.			
(Tephrosia rosea var. Port Hedland) (not threatened)				
Drinking water source area	13km east of the premises boundary			
De Grey River Water Reserve				

Hydrography – surface water bodies	Within premises boundary			
Heritage / cultural receptors	Distance from prescribed activity			
Aboriginal sites and Heritage places:				
Whim Creek 28, Packsaddle	• 2.7km north of the premises boundary			
23 Mile Creek	• 3.92km north of the premises boundary			
Tabba Tabba Mouth 1	Within premises boundary			
Tabba Tabba Mouth 2	Within premises boundary			
Tabba Tabba Mouth 3	Within premises boundary			
Limestone Quarry 1	1km north of the premises boundary			
Tkalka Boorda	• 2.45km northwest of the premises boundary			
• 12 Mile	• 4.88km south of the premises boundary			
Punju Njamal	• 2.14km south of the premises boundary			
 Jinparinya 	• 3.2km south of the premises boundary			



Figure 1: Distance to sensitive receptors



Figure 2: Dampier Salt - Aboriginal sites

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L7183/1997/11 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. salt manufacturing activities.

The conditions in the Revised Licence have been determined in accordance with Guidance Statement: Setting Conditions (DER 2015).

Risk Event				Risk rating ¹	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Operation								
Intake pumping, evaporation ponds, salt stockpiles, and processing plant.	Dust	Air/windborne pathway causing impacts to health and amenity	Residential receptors located 1km north of the premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A	The Licence Holder has not provided any controls in relation to dust and the existing licence does not address this emission. Based on the nature of the operations and that the closest residential receptor is approximately 1km north of the premises the Delegated Officer considers there will not be any adverse impacts from dust emissions, and therefore no regulatory controls are required under this licence. For noting, general provisions of the EP Act apply.
	Noise	Air/windborne pathway causing impacts to health and amenity	Residential receptors located 1km north of the premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A	The Licence Holder has not provided any controls in relation to noise and the existing licence does not address this emission. Based on the nature of the operations and that the closest residential receptor is approximately 1km north of the premises the Delegated Officer considers there will not be any adverse impacts from noise emissions, and therefore no regulatory controls are required under this licence. The <i>Environmental</i> <i>Protection (Noise) Regulations</i> 1997 always apply.
	Brine	Infiltration of Brine / hypersaline water	Groundwater	Refer to	C = Moderate	Ν	Condition 1	The Licence Holder has provided the existing controls

Risk Event					Risk rating ¹	Licence			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence Holder's L = likelihood sufficient?		Conditions ² of licence	Justification for additional regulatory controls	
		through seepage of the base and embankment of ponds	Surface water Aboriginal heritage sites	Section 3.1	L = Possible Medium Risk			in place for all the ponds including constructed using in- situ clay material, 800mm thick salt batter protection for the crystalliser levees. These controls have been included as new conditions in the licence to manage seepage (condition 1).	
		Unintentional discharge through spills / leaks of pipeline	Surrounding vegetation and surface water	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1	The licence holder has advised that they undertake visual inspections weekly to check the integrity of the brine channel and discharge gates, this has been included as a new condition in this licence (condition 1) There is existing leak detection and monitoring in place. This has been included as a new condition in this licence (Condition 1).	
		Overtopping ponds	Surrounding vegetation and surface water	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 Condition 3	The licence holder advised they complete weekly monitoring of the gauge readings in all ponds and crystalliser ponds and monitor the freeboard of the concentrator ponds and crystalliser field 250mm freeboard, this has been included in the licence conditions (condition 1). Seawall perimeter levees to be covered with light weight rock armor (condition 1). The existing discharge points	

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Risk Event					Risk rating ¹	Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
								brine / hypersaline water and bitterns to the ponds has been included in the licence (Condition 3).
Intake pumping, evaporation ponds, salt stockpiles, and processing plant.	Stormwater contaminated with hypersaline water	Overtopping	Surrounding vegetation and surface water	Refer to Section 3.1	C = Slight L = Possible Low Risk	Y	Condition 2	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. Bold and underline text depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Department of Planning, Lands and Heritage (DPLH) referred amendment proposal on 19/04/2023	None received	N/A
Wanparta Aboriginal Corporation C/- Maclean Legal referred amendment proposal on 19/04/2023	None received	N/A
Kariyarra Aboriginal Corporation referred amendment proposal on 19/04/2023	None received	N/A
Licence Holder was provided with draft amendment on 6/11/2023 and additional draft on 15/12/2023	Refer to Appendix 1	Refer to Appendix 1

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Figure 3: Map of original proposal, EPA Bulletin 505

L7183/1997/11



Figure 4: Indicative approved boundary with tenements

L7183/1997/11

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Condition no.	Proposed amendments
1	Revised to current licensing format.
	Additional controls have been included for the concentrator ponds $(0 - 8)$, flow equalisation pond (pond 9) and crystalising field.
	Additional controls have been included for the transfer pipelines to undertaken visual checks to assess the integrity and monitor for leaks.
3	Revised to current licensing format. Brine, saline and / or hypersaline water sourced from abstraction bores discharge point has been included int the authorised discharge points.
8	Groundwater monitoring

 Table 6: Summary of licence amendments

Table 7: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Expiry Date: 21/09/2018	Expiry Date: 21/09/2027	In accordance with the Notice of Amendment of Licence Expiry Dates (29/04/2016)
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.
1.1.1 1.1.2	Interpretation and definitions	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.1.3	Australian or other standard	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.1.4	Reference to code of practice	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.2.1	General conditions – pollution control and monitoring systems	1	Revised to current licensing format.
1.2.2	Recovery and removal of spills	1	Revised to current licensing format and wording.

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.2.3	Prevention of contamination and containment of contaminated stormwater	2	Revised to current licensing format and wording.
2.1.1	Record and investigate exceedances of limits or targets	N/A	Redundant condition. Deleted from licence.
2.2.1	Point source emissions to surface water	3	New numbering and update to wording format
2.3.1	Emissions to land	4	New numbering and update to wording format
2.3.2, 3.3.1	Monitoring of emissions to land including limits	8	New numbering and update to wording format
3.1.1	General monitoring	5	New numbering and update to wording format
3.1.2	Monitoring timelines	6	New numbering and update to wording format
3.2.1	Monitoring of point source emissions to surface water	7	New numbering and update to wording format
4.1.1	Records	9	New numbering and update to wording format
4.1.2	Records	N/A	Redundant condition deleted.
4.1.3	Complaints	9	New numbering and update to wording format
4.2.1	AER	10 and 11	New numbering and update to wording format
4.2.2	AER	N/A	Redundant condition deleted.
4.3.1	Breach of limit	N/A	Redundant condition deleted.
Schedule 1: Maps	Premises map	Schedule 1: Maps	New naming convention, maps have been updated
Schedule 2 Reporting & notifications	Annual Audit Compliance Report Form N1 Notification	N/A	Redundant attachment. Deleted from Licence Forms accessed at www.dwer.wa.gov.au

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Draft Amendment Report		
Multiple	The Licence Holder requests the following minor changes for typos:	Minor spelling and errors have been corrected.
	Table 2:	
	• Page 5, Brine: Proposed controls should read Due to the large area for operations rather than Due to the large area for operators, and <i>crystalliser</i> rather than <i>crystallier</i> .	
	• Page 6, Bitterns: Proposed controls should read <i>management</i> rather than <i>mange</i> .	
	 Page 13 and 20, Update of the terminology of transfer pipelines to brine channel and discharge gates for consistency. Explanations are provided below for specifics. 	
	 Page 20: Update spelling from crystalising pond to crystallising field pond. 	
	 Page 24: Update spelling in Applicant and Premises details from Port Hedlands Operations to Port Hedland Operations. 	
Amendment Report	The Licence Holder requests for the following update to the wording in section 2.2.1 Existing Licence Operations:	The site infrastructure wording has been updated as requested by the Licence Holder.
2.2.1	Capacity of crystallising pond-<mark>field:</mark>	
Existing licence Operations:	Total productive area of 30 crystalliser ponds is 1,070 hectares with a target depth of $0.2 - 0.5$ metres of brine.	
Table 4. Risk assessment	The Licence Holder requests for the following update to wording in Table 4. Risk assessment of potential emissions and discharges from the Premises during operations:	 As this monitoring is already undertaken as part of the contaminated sites management
ot potential emissions and	1. Brine – Infiltration of Brine / hypersaline water through seepage of the base and embankment of ponds:	plan, the proposed condition regarding groundwater monitoring is

discharges from the Premises during operation	2. 3.	Licence Holder advised that groundwater monitoring is undertaken biennially to monitor the potential seepage of brine as part of a site management plan for ongoing monitoring associated with a classified contaminated site (ID 18012). The Delegated Officer has considered the increase to throughput and the sensitive receptors and included the groundwater monitoring for standing water level and salinity to be undertaken annually (condition 8). Brine – Unintentional discharge through spills / leaks of brine channel and discharge gates. The Licence holder has advised that they undertake visual inspections every 12 hours weekly (licence holder to confirm) to check the integrity of the transfer pipelines brine channel and discharge gates, this has been included as a new condition in this licence (condition 1). There is existing leak detection and monitoring in place. This has been included as a new condition in this licence (condition 1). Brine: Overtopping ponds The Licence Holder advised they complete weekly monitoring of the gauge readings in all ponds and crystalliser ponds and monitor the freeboard of the concentrator ponds and crystalliser filed (250mm freeboard) (Licence Holder to confirm), this has been included in the licence conditions (condition 1).	2.	considered unnecessary and will not be included in the final licence. The wording and references have been updated as requested. Visual inspections changed from 12 hourly to weekly given the limitations and reasoning provided by the Licence Holder. The wording and references have been updated as requested.
Draft Licence				
Registered business address	The Lic Central 152-158 PERTH Update	ence Holder requests for the following updates to the registered address: Park Level 18, 8 St Georges Terrace, WA 6000 to current ASIC / ACN registration (attached)	The Re updated	egistered business address has been d, as requested by the Licence Holder.
Multiple	The Lic Table 2 •	ence Holder requests for the following minor changes for typos: : Brine Proposed controls should read noting rather than nothing.	Update licence.	d in the Decision Report not in the

Condition 1 Table 1	The Licence Holde	er requests for the following update	s to the table	1	The references to the site infrastructure and equipment has been updated, as requested by the licence holder.				
Infrastructure and Equipment	equipment - Concentrator ponds (0 - 8) - Flow equalisation pond (Pond 9) - Crystalliser Pond field	Constructed within in-situ clay material. Constructed within in-situ clay material. The batters of the crystalliser levees constructed with 80mm thick salt batter protection. Gauge monitoring of all ponds to take place weekly. Embankments adequately maintained to provide a minimum freeboard of 250 mm per concentrator pond and crystalliser pond field Outside of bund wall Seawall perimeter levees to be	Ponds as shown in Figure 2 of Schedule 1.		The visual inspections have been changed from every 12 hours to weekly as requested by the Licence Holder, given the limitations and reasoning provided by the licence holder.				
	Transfer pipelines • Brine channel (concentrator ponds to crystalliser field) • Discharge gates (Paradise Creek and 6-Mile Creek)•	covered with light Veight rock armor. Visual inspections <u>occur</u> : • Visual inspections <u>occur</u> : • <u>eveny 12 hours weekly (Licence Holder to</u> <u>eveny 12 hours weekly (Licence Holder to</u> <u>of the transfer pipelines</u> brine channel, and <u>weekly when in operation to check the integrity</u> of the discharge gates <u>Leak detection prevention and management (Licence</u> Holder to confirm the details) + High level switches in the brine delivery channel that interlock with the pumps to maintain the levels in the brine channel	Brine channel and discharge gates (Paradise Creek ad 6- Mile Creek) as shown in Figure 2 of Schedule 1.		It is noted that due to the existing infrastructure it is not possible to maintain a 250mm freeboard across all ponds, however as the ponds are part of an interconnected system where pumping rates can be controlled it is suitable to require 250mm freeboard across the crystalliser field as there is capacity fo				
	Update from crysta the total productive exclusively allow Attachment 1: Col individual crystallis level switches in th across the crystalli	alliser ponds to crystalliser field as r e area. In addition, each individual for 250mm per crystalliser pond ncentrator and Crystalliser Ponds ser ponds (weekly gauge readings, ne brine delivery channel which inte ser field.	e differentiate the individual ponds to within the crystalliser field) does not RTIO RFI response 20 July 2023, however, with management of the ing rates or sluice gates, and high- inps) there can be 250mm freeboard	Additionally, it is noted that the Florequalisation pond (Pond 9) does not hav capacity for a 250 mm freeboard and is no considered part of this condition. The volum of Pond 9 can be otherwise managed throug					
	The current capaci indicated in RTIO Levels). The Licen that there are curr pumping rates or s pumps).	tity of the Flow equalisation pond RFI response 20 July 2023, Attach ice Holder requests for this pond t ent controls in place to manage the sluice gates, and high-level switche	the control measures provided.						
	Update fifth dot po does have rock arr	int, as not all of the bund walls are nor.	covered with rock a	armor, however the exterior seawall					
	Update Transfer p operation that wou managed and con proposed changes	bipelines to Brine channel and dis ald leak, rather, the overland brine trolled. Level management of the capture the main infrastructure for							
	Update from every operation, nightshi salt, stockpiling an time only and requ	12 hours to weekly, which is the construction of the second secon							
	Update the referen	nce from "pipelines" to "Brine chann	els and discharge	gates" to be in line with the licence.					

Condition 3	The Licence Holder requests the following updates to the table:								The updated wording has been included in this licence amendment, as requested by the	
Table 2:	Emission type	Dischargo p	oint	Dischargo poi	at location				licence holder.	
Authorised discharge	Brine, saline and / or hypersaline water sourced from abstraction bores	Via transfer concentrator	pipelines channels to F ponds, equalisation pond	Ponds as shown in Figure 2						
points	Bitterns	Via transfer Six Mile Cre Via transfer	pipeline channels outlets to ek bitterns discharge point. pipeline outlets to Paradise							
	Update Transfer pipelines to c	hannels as	there are minimal pipel	ines at the	e operatio	n (as ab	ove).			
	There are no abstraction bore	s currently u	used for the operation.							
Condition 7 Monitoring	The Licence Holder requests	the following	update to Table 4: Em	nissions ar	nd dischar	ge mon	itoring:		The 6-Mile Creek Discharge Gate has been included in this licence amendment, as requested by the licence holder.	
Ũ	Discharge point location	Parameters				Units	Frequenc	y I	requested by the licence holder.	
	"Paradise Creek Discharge	/olume				L/s	Monthly			
	Gate" and "6-Mile Creek					M ³ /day	cumulativ	•		
	Discharge Gate" (Figure 2)	^C blorido, culph	ato codium magnocium r	ootaeeium (saleium	mall	Six month	dv.		
	Discharge Gate (Figure 2)	Chloride, sulphate, sodium, magnesium, potassium, calcium,				ilig/L	Six monu	'y		
		Provide land mercury richal total riter and total phase berg								
		fluoride, lead, mercury, nickel, total nitrogen, total phosphorus					-			
		EC				µS/cm				
		ьH				pН				
						units				
	Update to the Discharge point locations to include 6-Mile Creek, which is a currently approved discharge point.						harge			
Condition 8 Monitoring of	The licence holder must undertak table and record and investigate r	e the ambient esults that do	groundwater monitoring ir not meet any limit specific	n lable 5 ad :d.	cording to	the spec	i tications in	that	As discussed above, this monitoring is already undertaken as part of the contaminated sites management plan, the proposed condition	
ambient groundwater	Monitoring point reference		Parameters	Units	Averaging	Frequ	iency		regarding groundwater monitoring is	
-	MW15_		Standing water level	Mbal	Spot	Annu	al		included in the final line is a	
	MW/17 MW/21 MW/22		orang nator lovor	mogr	sample				included in the final licence.	
	MW/22 MW/20 MW/24		Flashing Construction (F		Sample	A	-1			
	MW22, MW29, MW34,		Electrical Conductivity (E	≊0) -	Spot .	Annu	ai			
	WVV36, WVV38, WVV39,				samples					
	MW41, MW101, MW105, MW10	7 & MW109.								
	(Figure 3)									
	The groundwater bores identified in Table 5 and Figure 3: Monitoring locations are associated with a classified site (ID 18012) and a respective contaminated sites Site Management Plan, therefore are not relevant to represent ambient groundwater quality for the operational premise.							with a re not		
	There are currently no other	groundwate	r bores within premise	boundary	which ar	e availa	ble for ar	nbient		

proundwater qua	lity monitoring and therefore RTIO seeks to object to this condition.			
The Licence Hole	der requests for the following updates:			
The Licence Hole	der must:	A Notice of Amendment of Licence reporting		
(a)	Undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and	requirements section 59(2), Section 59(1)(a) and 59(1)(b) Environmental Protection Act		
(b)	Preppare and submit to the CEO by no later than 30 days after the end of that annual- period by <mark>30 April each year</mark> an Annual Audit Compliance Report in the approved form.	Licence Holder on 13 May 2022.		
Jpdates propose	ed are to align with the current requiremeents to submit an AACR by 30 April.	The Licence reporting requirements for the Annual Environmental Report was changed to		
The licence hold biennially thereat any conditon and	er must submit to the CEO an Annual Environmental Report by 30 April 2024 and fter. The report shall contain the monitoring results and data collected as a requirement of a set out in Table XX of this licence.	biennially, and these changes have bee updated in this amendment as requested i the Licence Holder.		
Proposed aligns Licence Reportin	with current reporting requirements, and Schedule 2 from DWER Notice of Amendment of g Requirements, dated 16 May 2022.			
/lay require an a	additional table to summarise reporting requirements.			
Refers to condtic	ons 7 and 0, this should be referring to conditon 8.	The condition has been updated.		
Refers to 'books nstead of book.	in condition 11 but this should be referring to condition 12. Request to refer to records	The condition has been updated. The term books is defined in the EP Act so will be retained for this condition.		
Jpdated cordina 50.	tes provided by the Licence Holder as requested by DWER. Project: GDA 1994 MGA Zone	Updates coordinates have been included in the licence.		
	e Licence Hold (a) (b) odates propose ne licence hold ennially therea by conditon and oposed aligns cence Reportir ay require an a efers to condito efers to condito	 buildwater quality individually and therefore K no seeks to object to this conductor. the Licence Holder requests for the following updates: the Licence Holder must: (a) Undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and (b) Preppare and submit to the CEO by no later than 30 days after the end of that annual period by 30 April each year an Annual Audit Compliance Report in the approved form. bodates proposed are to align with the current requiremeents to submit an AACR by 30 April. the licence holder must submit to the CEO an Annual Environmental Report by 30 April 2024 and ennially thereafter. The report shall contain the monitoring results and data collected as a requirement of by condition and set out in Table XX of this licence. oposed aligns with current reporting requirements, and Schedule 2 from DWER Notice of Amendment of cence Reporting Requirements, dated 16 May 2022. ay require an additional table to summarise reporting requirements. befers to condition 7 and 0, this should be referring to conditon 8.		

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY								
Application type								
Works approval								
		Relevant works approval number:		Non e				
		Has the works complied with?	s approval been	Yes 🗆] No □			
Licence		Has time limited o works approva acceptable operat	perations under the al demonstrated ions?	Yes 🗆] No 🗌 N/A 🗌			
		Environmental Co Critical Containn Report submitted?	ompliance Report / nent Infrastructure	Yes 🗆] No □			
		Date Report recei	Date Report received:					
Renewal		Current licence number:						
Amendment to works approval	nt to works approval umber:							
		Current licence number:	L7183/1997/11					
Amendment to licence		Relevant works approval number:		N/A				
Registration		Current works approval number:		Non e				
Date application received			1		l			
Applicant and Premises detail	s							
Applicant name/s (full legal name	e/s)	Dampier Salt Limited						
Premises name		Port Hedland Operations						
Premises location		ML242SA, ML250SA and M269SA						
Local Government Authority		Town of Port Hedland						
Application documents								
HPCM file reference number:		DER2014/000086-1						
Key application documents (add to application form):	litional	Application form, map and fees.						
Scope of application/assessment								

Summary of proposed activities changes to existing operations.	or	Licence amendment: Operation of Category 14 Prescribed premises boundary extended to: L45/00220 L45/00315 and L45/00370					
Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories							
Prescribed premises category and description	Assessed production o design capacity		Proposed char production c capacity (ameno	iges to the or design dments only)			
Category 14: Solar salt manufacturing	3,20	00,000 tonnes per annum	4,000,000 tonnes	s per annum			
Legislative context and other approvals							
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?		Yes □ No ⊠	Referral decision No: Managed under Part V □ Assessed under Part IV □				
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes 🗵 No 🗆	Vinisterial statement No: EPA Report No: MS147				
Has the proposal been referred and/or assessed under the EPBC Act?		Yes 🗆 No 🖂	Reference No:				
Has the applicant demonstrated occupancy (proof of occupier status)?		Yes ⊠ No □	Certificate of title Certificate of title General lease Certificate of title General lease Certificate Certificate				
Has the applicant obtained all relevant planning approvals?		Yes ⊠ No □ N/A □	Approval: Expiry date: f N/A explain why? Mining enements.				
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?		Yes □ No ⊠	CPS No: N/A No clearing is prop	osed.			

Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes 🗆 No 🖂	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.	
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Application reference No: Licence/permit No: Licence / permit not required.	
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ⊠ No □	 Name: Pilbara Surface Water Area / Pilbara Groundwater area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes □ No ⊠ N/A □ Regional office: North West 	
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes No N/A Note: If the proposed activity is not listed as a compatible land use with the PDWSA please consult with the relevant regional office (Regulatory Services - Water) and Water Source Protection (Science and Planning).	
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	State Agreement Act Leslie Solar Salt Industry Agreement Act 1966	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No □		
Is the Premises subject to any EPP requirements?	Yes □ No ⊠		

Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?		Classification: awaiting classification
		Date of classification: N/A
	Yes ⊠ No □	