



Ms Eefje Broenland
Environmental Manager
Onslow Salt Pty Ltd
Level 16, Exchange Plaza
2 The Esplanade
PERTH WA 6000

Dear Ms Broenland

ENVIRONMENTAL PROTECTION ACT 1986 – AMENDMENT TO LICENCE

Licence: L7180/1997/11

Premises: Onslow Salt Operation

Further to my letter dated 15 August 2014, please find enclosed your amended *Environmental Protection Act 1986* licence.

If you have any questions or objections relating to the licence, please do not hesitate to contact the enquiries officer above on (08) 9182 2009 for clarification or discussion of any grievances you have.

If you are concerned about, or object to any aspect of the amendment, you may lodge an appeal with the Minister for the Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the amendments. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

Yours sincerely

Danielle Eyre
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Thursday, 4 September 2014

enc: *Environmental Protection Act 1986* Licence L7180/1997/11, Decision Document
copy to: Local Government Authority: Shire of Ashburton



Licence

Environmental Protection Act 1986, Part V

Licensee: Onslow Salt Pty Ltd

Licence: L7180/1997/11

Registered office: Level 16 Exchange Plaza
2 The Esplanade
PERTH WA 6000

ACN: 050 159 558

Premises address: Onslow Salt Operation
AM70/273, AG70/7, AG70/8, AG70/9, AG70/10, AG70/11, AG70/13,
G8/38, G8/39, G8/40, G8/41, G8/42, G8/43, G8/44, G8/45 and G8/46
ONSLow WA 6710
As depicted in Schedule 1

Issue date: Thursday, 8 March 2012

Commencement date: Sunday, 11 March 2012

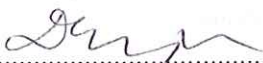
Expiry date: Friday, 10 March 2017

Prescribed premises category
Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
14	Solar salt manufacturing: premises on which salt is produced by solar evaporation	Not applicable	3 500 000 tonnes per annual period
58A	Bulk material loading or unloading: premises on which salt is loaded onto or unloaded from vessels by an open materials loading system	100 tonnes or more per day	3 500 000 tonnes per annual period

Conditions

This Licence is subject to the conditions set out in the attached pages.


.....
Officer delegated under section 20
of the *Environmental Protection Act 1986*



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This licence is issued under Part V of the Act. Conditions contained within the licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.



You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

Onslow Salt Pty Ltd (OSPL) operate the Onslow Salt (OS) operation approximately one kilometre (km) from the township of Onslow in the Pilbara region of Western Australia. The OS operation produces up to 3 500 000 tonnes of salt each year by solar evaporation of brine through ponds.

The OS operation involves pumping seawater from the eastern arm of Beadon Creek into condenser ponds where concentrated brine is produced. This brine is channelled through the ponds to the crystallisers where salts crystallise out. Salt harvested from the crystallisers is trucked on the private haul road to the wash plant near the base of the jetty. After washing, salt is stockpiled ready for loading by conveyor onto ships. The remaining bitterns (consisting of uncrystallised salts of mainly potassium and magnesium) is discharged through the Middle Creek discharge inverted channel in accordance with Ministerial Statement 401.

This Licence is the result of an amendment sought by the Licensee to increase the capacity of category 14 and 58A from 2 500 000 tonnes to 3 500 000 tonnes per year. The increase in capacity is associated with the addition of three crystallisers constructed under works approval W5335/2012/1, which was issued on the 28 February 2013. Compliance documentation was received on the 17 March 2014. During this amendment the existing licence has been converted to the REFIRE format.

The licences and works approvals issued for the Premises since 26 September 2000 are:

Instrument log		
Instrument	Issued	Description
L7180/1997/4	26/09/2000	First licence noted in the Industry Licensing System
L7180/1997/5	26/09/2001	Licence reissue
L7180/1997/6	23/03/2002	Licence reissue
L7180/1997/7	23/03/2003	Licence reissue
L7180/1997/8	26/03/2004	Licence reissue
L7180/1997/9	11/03/2005	Licence reissue
L7180/1997/10	11/03/2007	Licence reissue
L7180/1997/11	11/03/2012	Licence reissue
W5335/2012/1	4/03/2013	Works approval for the construction of three additional crystallisers
L7180/1997/11	4/09/2014	Amendment to increase design capacity of category 14 and 58A and convert to REFIRE format



Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'annual period' means the inclusive period from 1 August until 31 July in the following year;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.9' means the Australian Standard AS/NZS 5667.9 *Water Quality – Sampling – Guidance on sampling from marine waters*;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Manager Licensing (North West)
Department of Environment Regulation
PO Box 835
KARRATHA WA 6714
Telephone: (08) 9182 2000
Facsimile: (08) 9144 1118
Email: northwest@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means the document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'fugitive emissions' means all emissions not arising from point sources;

'Licence' means this Licence numbered L7180/1997/11 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;



'**µS/cm**' means microSiemens per centimetre;

'**NATA**' means the National Association of Testing Authorities, Australia;

'**NATA accredited**' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'**Premises**' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'**quarterly**' means the 4 inclusive periods from 1 August to 31 October, 1 November to 31 January in the following year, 1 February to 30 April and 1 May to 31 July;

'**Schedule 1**' means Schedule 1 of this Licence unless otherwise stated;

'**Schedule 2**' means Schedule 2 of this Licence unless otherwise stated;

'**six monthly**' means the 2 inclusive periods from 1 August to 31 January in the following year and 1 February to 31 July; and

'**spot sample**' means a discrete sample representative at the time and place at which the sample is taken.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.2 General conditions

1.2.1 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:

- (a) pollution;
- (b) unreasonable emission;
- (c) discharge of waste in circumstances likely to cause pollution; or
- (d) being contrary to any written law.

1.2.2 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.5 The Licensee shall:

- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
- (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.¹

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.



1.3 Premises operation

- 1.3.1 The Licensee shall contain all washwater from the washing process within the washpad area and collection drains.
- 1.3.2 The Licensee shall direct collected washwater from the salt washing process, to the settlement ponds for recycling with any excess water pumped to the condenser ponds.
- 1.3.3 The Licensee shall maintain a minimum freeboard of 300 mm on all outer levees to accommodate extreme rainfall events.



2 Emissions

2.1 General

- 2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this licence.

2.2 Point source emissions to air

There are no specified conditions relating to point source emissions to air in this section.

2.3 Point source emissions to surface water

- 2.3.1 The Licensee shall ensure that where waste is emitted to surface water from the emission point in Table 2.3.1 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 on Map of emission points	Emission point reference	Description	Source
W1	Bitterns discharge channel	Bitterns discharge to Middle Creek via discharge channel to Indian Ocean	Salt, concentrated brine and saline constituents

- 2.3.2 The Licensee shall ensure that all salt, concentrated brine and saline constituents are only discharged to Middle Creek at half tide or higher via a discharge channel.

2.4 Point source emissions to groundwater

There are no specified conditions relating to point source emissions to groundwater in this section.

2.5 Emissions to land

- 2.5.1 The Licensee shall ensure that where waste is emitted to land from the emission point in Table 2.5.1 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 on Map of emission points	Emission point reference	Description	Source including abatement
L1	Wastewater discharge channel	Discharge of treated wastewater to unlined evaporation channel	Wastewater potentially contaminated with hydrocarbons from the light vehicle refuelling/washdown area, heavy vehicle refuelling/washdown area and main workshop that has gone through an oily water separator



2.5.2 The Licensee shall not cause or allow emissions to land greater than the limits listed in Table 2.5.2.

Table 2.5.2: Emission limits to land			
Emission point reference	Parameter	Limit (including units)	Averaging period
L1	Total Recoverable Hydrocarbons	15 mg/L	Spot sample

2.6 Fugitive emissions

There are no specified conditions relating to fugitive emissions in this section.

2.7 Odour

There are no specified conditions relating to odour in this section.

2.8 Noise

There are no specified conditions relating to noise in this section.



3 Monitoring

3.1 General monitoring

3.1.1 The Licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all surface water sampling is conducted in accordance with AS/NZS 5667.9; and
- (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that where practicable:

- (a) quarterly monitoring is undertaken at least 45 days apart; and
- (b) six-monthly monitoring is undertaken at least 5 months apart.

3.1.3 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

3.1.4 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air in this section.

3.3 Monitoring of point source emissions to surface water

There are no specified conditions relating to monitoring of point source emissions to surface water in this section.

3.4 Monitoring of point source emissions to groundwater

There are no specified conditions relating to monitoring of point source emissions to groundwater in this section.

3.5 Monitoring of emissions to land

3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table.

Table 3.5.1: Monitoring of emissions to land			
Emission point reference	Parameter	Units	Frequency
L1	Total Recoverable Hydrocarbons	mg/L	Quarterly

3.6 Monitoring of inputs and outputs

There are no specified conditions relating to monitoring of inputs and outputs in this section.



3.7 Process monitoring

There are no specified conditions relating to process monitoring in this section.

3.8 Ambient environmental quality monitoring

3.8.1 The Licensee shall undertake the monitoring in Table 3.8.1 according to the specifications in that table.

Table 3.8.1: Monitoring of ambient surface water			
Emission point reference	Parameter	Units	Frequency
Middle Creek (D1 to D10) Offshore (A1 to A5, B1 to B5 and C1 to C5)	Electrical Conductivity ¹	µS/cm	Six-monthly

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

3.9 Meteorological monitoring

There are no specified conditions relating to meteorological monitoring in this section.

4 Improvements

There are no specified improvement conditions in this section.



5 Information

5.1 Records

- 5.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 5.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 5.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 5.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by the 31 December each year. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
-	Total amount (tonnes per year) of salt that was harvested and shipped and bitterns discharged during the annual period	None specified
Table 3.5.1	Total Recoverable Hydrocarbon	LR1
Table 3.8.1	Electrical Conductivity	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2



- 5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) the characteristics and volume of any discharges to the environment;
 - (b) the resultant impact and potential future impacts of any discharges on the receiving environment; and
 - (c) a current plan of the Premises depicting the location and extent of discharges into the environment.

5.3 Notification

- 5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

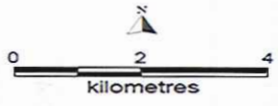
Table 5.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part B: As soon as practicable	
3.1.4	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 2



- Current licence premises boundary
- Levee walls / Access routes
- Flow arrow / Culvert



ONNSLOW SALT PTY LTD		Onslow Solar Salt Field Operations	
Author: OSPL	Date: 18/02/2010		
Drawn: P Sawers	Revised: 11/08/2014		
Job No.: 512	Report No.:		
Projection: MGA Zone 50	Scale: 1 : 100 000 @ A4		

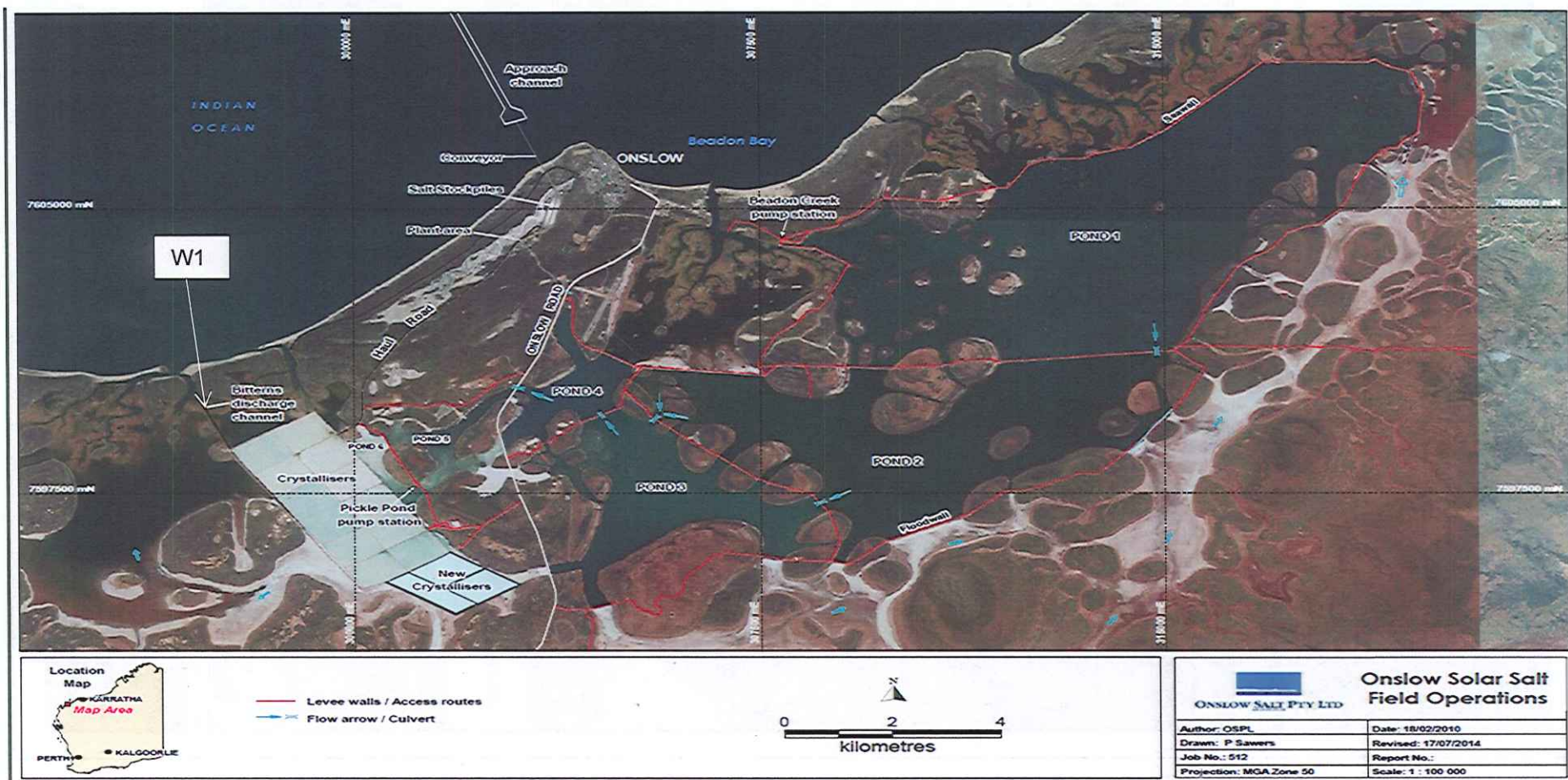
Amendment date: Thursday, 4 September 2014



Map of emission points

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

Emission points to surface water





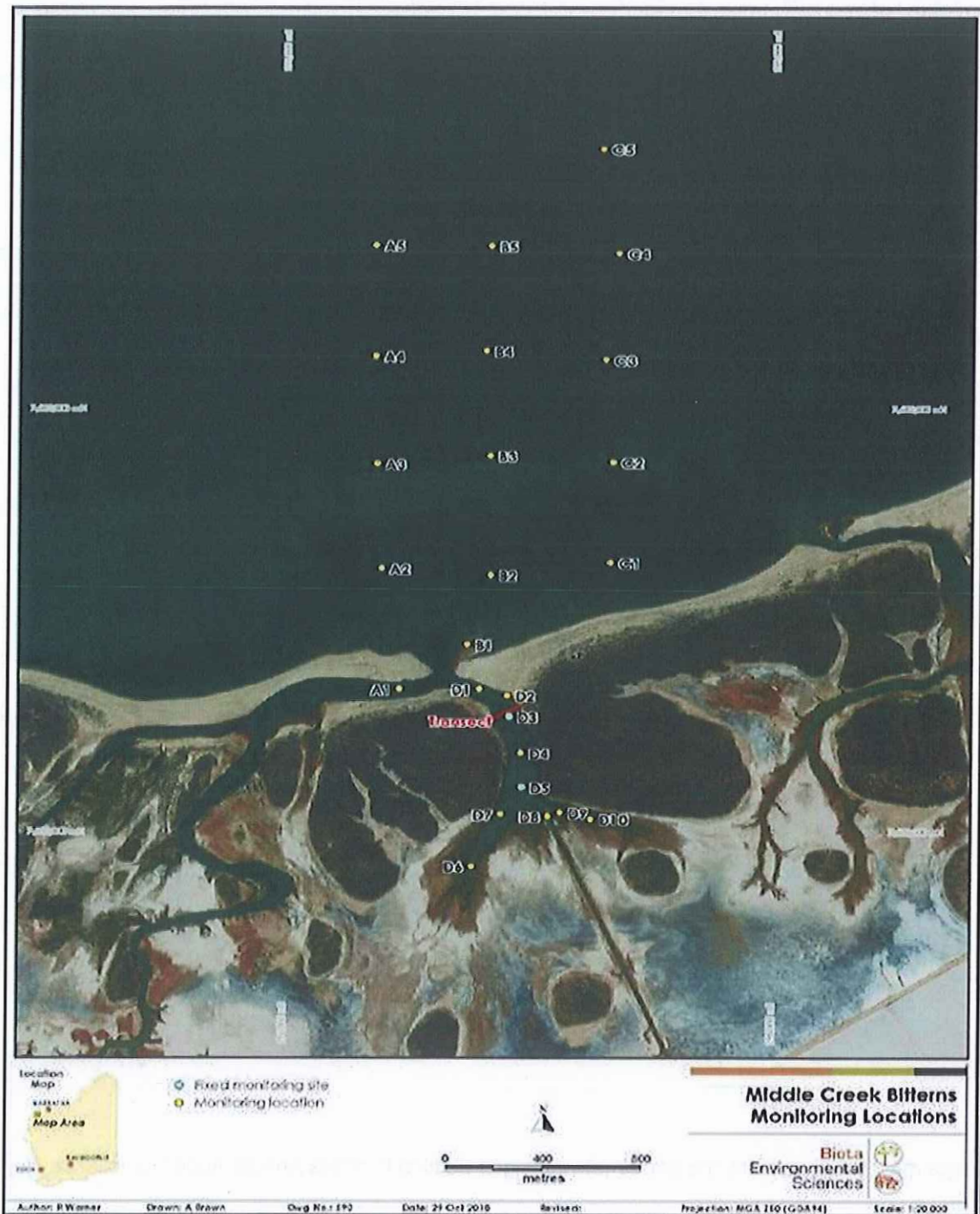
Legend Waste water discharge OSPL tenements	 	Author: Eefje Broenland	 ON SLOW SALT
		Date Saved: 25/06/2014	
Path: I:\DATA\Onslow Salt Pty Ltd\Environmental\GIS\Maps\External\OWS discharge area.mxd		Datum: GDA 1994 MGA Zone 50	OWS discharge area
		Scale: 1:4,000	

Amendment date: Thursday, 4 September 2014



Map of monitoring locations

The locations of the monitoring points defined in Table 3.8.1 are shown below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A

LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) must only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L7180/1997/11
Form: LR1
Name: Monitoring of emissions to land

Licensee: Onslow Salt Pty Ltd
Period:

Form LR1: Monitoring of emissions to land						
Emission point	Parameter	Limit	Result	Averaging period	Method	Sample date & times
L1	Total Recoverable Hydrocarbons	15	mg/L	Spot sample		

Signed on behalf of Onslow Salt Pty Ltd: Date:



Licence: L7180/1997/11
Form: N1

Licensee: Onslow Salt Pty Ltd
Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.
Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	



Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment, which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Onslow Salt Pty Ltd	
Date	



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a works approval or licence, 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.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



2 Administrative summary

Administrative details							
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>						
Activities that cause the premises to become prescribed premises	<table border="1"> <thead> <tr> <th>Category number(s)</th> <th>Assessed design capacity</th> </tr> </thead> <tbody> <tr> <td>14</td> <td>3 500 000 tonnes per year</td> </tr> <tr> <td>58A</td> <td>3 500 000 tonnes per year</td> </tr> </tbody> </table>	Category number(s)	Assessed design capacity	14	3 500 000 tonnes per year	58A	3 500 000 tonnes per year
	Category number(s)	Assessed design capacity					
	14	3 500 000 tonnes per year					
58A	3 500 000 tonnes per year						
Application verified Date: 4/01/2012 Application fee paid Date: 20/01/2012							
Works Approval has been complied with	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>						
Compliance Certificate received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>						
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Commercial-in-confidence claim outcome	N/A						
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>						
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Ministerial statement No: 401 and 451 EPA Report No: 0401 and 0451						
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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.							
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.							



3 Executive summary of proposal and assessment

Onslow Salt Pty Ltd (OSPL) operate the Onslow Salt (OS) operation approximately one kilometre (km) from the township of Onslow in the Pilbara region of Western Australia. The OS operation produces up to 3 500 000 tonnes of salt each year by solar evaporation of brine through ponds.

The OS operation involves pumping seawater from the eastern arm of Beadon Creek into condenser ponds where concentrated brine is produced. This brine is channelled through the ponds to the crystallisers where salts crystallise out. Salt harvested from the crystallisers is trucked on the private haul road to the wash plant near the base of the jetty. After washing, salt is stockpiled ready for loading by conveyor onto ships. The remaining bitterns (consisting of uncrystallised salts of mainly potassium and magnesium) is discharged through the Middle Creek discharge channel in accordance with Ministerial Statement 401.

The key components of the OS operation consist of:

- seawater concentration ponds, sourced from Beadon Creek via seawater pump station;
- crystalliser ponds;
- discharge of bitterns via Middle Creek;
- salt washing facilities including settling ponds;
- seawater pumps at jetty head and overland delivery pipe supplying process water to the salt washing facility;
- dump bridge and associated plant and equipment;
- stockpile area; and
- reclaimer, conveyor and shiploader.

This amendment conducted in August 2014, is to increase the design capacity of category 14 and 58A from 2.5 million tonnes per year (Mtpa) to 3.5 Mtpa. The increase in capacity is associated with the construction of three additional crystallisers constructed under works approval W5335/2012/1, which was issued on the 28 February 2013. Compliance documentation was received on the 17 March 2014. Ministerial Statement 451 has assessed the increase in production capacity (3.5 Mtpa) under a section 45C of the *Environmental Protection Act 1986*.



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	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1 – L1.2.5.	OSC.	<p><u>Emission Description</u> <i>Emission:</i> Stormwater possibly contaminated with hydrocarbon from operations and hydrocarbon spills to the surrounding environment. <i>Impact:</i> Contamination of surrounding land. <i>Controls:</i> OSPL have implemented the following:</p> <ul style="list-style-type: none"> the two fuel storage facilities (220 000 litres (L)) are bunded and geotextile lined and are used to meet the fuel requirements of on site plant and equipment only; and re-fuelling is conducted via equipment fitted with automatic shut off valves and is manned at all times. <p>OSPL have confirmed that the fuel storages comply with the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i> and Australian Standards 1940-2004.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor. <i>Likelihood:</i> Possible. <i>Risk Rating:</i> Moderate.</p> <p><u>Regulatory Controls</u> OSC L1.2.5 has been added to the licence to ensure measures are implemented to prevent stormwater run-off from becoming contaminated. The licence also has SC L1.2.3 and SC L1.2.4, which</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>Department of Mines and Petroleum code of practice for the storage and handling of dangerous goods.</p> <p>Australian Standard 1940-2004 The storage and handling of flammable and combustible liquids.</p> <p><i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i>.</p>

	<p><u>Residual Risk</u> <i>Consequence:</i> Minor. <i>Likelihood:</i> Rare. <i>Risk Rating:</i> Low.</p>	
NSC.	<p><u>Emission Description</u> <i>Emission:</i> Containment, collection and re-use of washwater from the salt washing process. <i>Impact:</i> Possible overflow of washwater and process water. <i>Controls:</i> Salt is washed in the on site wash plant in high density brine. Process water (brine) from the wash plant is stored within the wash plant settling ponds. The saturated brine contained within these ponds is used to wash the raw salt and remove the insoluble impurities such as fine sand etc., which then settles out into these ponds. The clean brine from the wash plant settling ponds is re-used in the wash plant and also used as a transportation medium for the salt as it is pumped through the plant.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant. <i>Likelihood:</i> Rare. <i>Risk Rating:</i> Low.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>Ministerial Condition 451.</p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><u>Regulatory Controls</u> Previous licence conditions 1, 2, 5 and 6 have been retained as NSC L1.3.1 to L1.3.3 which requires the licensee to:</p> <ul style="list-style-type: none"> contain all washwater from the washing process within the washpad area and collection drains; direct collected washwater from the salt washing process to the settlement ponds for recycling with any excess water pumped to the condenser ponds; and maintain a minimum freeboard of 300 millimetres (mm) on all outer levees to accommodate extreme rainfall events; and <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant. <i>Likelihood:</i> Rare. <i>Risk Rating:</i> Low.</p>	
Emissions general	L2.1.1.	OSC.	Limits have been set through condition L2.5.2 of the licence and therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	N/A.
Point source emissions to air including monitoring	L2.2 and L3.2.	N/A.	There are no point source air emissions during operation. No specified conditions relating to point source emissions to air or the monitoring of such emissions are required on the licence.	General provisions of the <i>Environmental Protection Act 1986</i> .
Point source emissions to surface water including monitoring	L2.3.1 and L3.3.	OSC.	DER's assessment and decision making are detailed in Appendix A.	General provisions of the <i>Environmental Protection Act 1986</i> . <i>Environmental Protection</i>

		<p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p> <p>EMS – Surface Water Monitoring Procedures.</p> <p>EMS – Bitterns Discharge/Bathymetric Monitoring Procedures.</p> <p>EMS - Offshore (Marine) Contaminant Procedures.</p> <p>Onslow Salt - Offshore (Marine) Chemical Spill Response Procedure.</p>
N/A.	<p>There are no point source emissions to groundwater during operation.</p> <p>No specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required on the licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p> <p><i>Environmental Protection</i></p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
				<i>(Unauthorised Discharges) Regulations 2004.</i>
Emissions to land including monitoring	L2.5.1, L2.5.2 and L3.5.1.	OSC.	DER's assessment and decision making are detailed in Appendix B.	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p> <p><i>Environmental Protection (Controlled Waste) Regulations 2004.</i></p> <p>EMS – Waste Management Procedures.</p> <p>Ministerial Statement 401.</p>
Fugitive emissions	L2.6.	N/A.	<p><u>Emission Description</u> <i>Emission:</i> Dust generated from vehicles and plant equipment. <i>Impact:</i> Reduced visibility and nuisance dust. <i>Controls:</i> OSPL have implemented the following to ensure that dust emissions are maintained:</p> <ul style="list-style-type: none"> • permanent haul roads and car parks have been sheeted with gravel; • water carts to apply the seawater from standpipes supplied from seawater storage at the wash plant; • dust suppression in condensers is supplied from the condenser 	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p> <p><i>Mines Safety and Inspection Regulations 1995.</i></p>

	<p><i>Risk Rating: Low.</i></p> <p><u>Regulatory Controls</u> No specified conditions relating to fugitive emissions are required on the licence. Salt stockpiles generally do not generate dust due to the nature of the material.</p> <p><u>Residual Risk</u> <i>Consequence: Insignificant.</i> <i>Likelihood: Rare.</i> <i>Residual Risk Rating: Low.</i></p>	
N/A.	<p>Odour emissions should not be significant during operation. No specified conditions relating to odour emissions are required on the licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p>
N/A.	<p><u>Emission Description</u> <i>Emission:</i> Noise generated from salt washing processes, stockpiling activities, conveyors and associated mining activities. <i>Impact:</i> There should be minimal impact as the premises is located over 1 km away from the nearest residential area, behind low scrub covered hills. <i>Controls:</i> OSPL have implemented the following management</p>	<p>General provisions of the <i>Environmental Protection Act 1986.</i></p> <p><i>Environmental Protection (Noise) Regulations 1997.</i></p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p>measures:</p> <ul style="list-style-type: none"> noise reduction methods have been incorporated into the design and operating procedures at OS operation; noise levels are monitored continuously using an automatic recorder near Clarke Place in Onslow; and all monitoring is carried out in accordance with the <i>Environmental Protection (Noise) Regulations 1997</i> and levels recorded in the Annual Environmental Report. <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant, the nearest sensitive receptor is over 1 km away behind low scrub covered hills. <i>Likelihood:</i> Rare. <i>Risk Rating:</i> Low.</p> <p><u>Regulatory Controls</u> No specified conditions relating to noise emissions are required on the licence.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant. <i>Likelihood:</i> Rare. <i>Residual Risk Rating:</i> Low.</p>	<p>Ministerial Statements 401 and 451.</p> <p>EMS – Noise Control Procedures.</p>
Monitoring general	L3.1.1 – L3.1.4.	OSC.	<p>OSC L3.1.1 to L3.1.4 have been added to the licence to ensure all sampling is conducted in accordance with <i>Australian/New Zealand Standard (AS/NZS) 5667</i>, submitted to a laboratory with National Association of Testing Authorities (NATA) accreditation (if applicable). Monitoring frequency and calibration of equipment have also been included.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p>

	this section.	
OSC.	<p>Ambient bitterns monitoring has been established to determine the potential impacts of bitterns discharged to the marine environment via Middle Creek. Monitoring is carried out using a dinghy and instruments measuring conductivity, temperature and pressure. The position is maintained using a hand-held GPS device and monitoring occurs twice a year (at minimum), during two different tidal conditions and considers two discrete areas:</p> <ul style="list-style-type: none"> • within Middle Creek itself; and • the marine environment immediately offshore from the creek mouth. <p>Advice from the former Department of Environment Conservation - Marine Ecosystems Branch, advised that seawater salinity off Onslow is approximately 36 000 parts per million, which equates to approximately 56 250 microSiemens per centimetre ($\mu\text{S}/\text{cm}$).</p> <p>Previous licence condition 7 relating to bitterns monitoring has been removed as OSC L3.8.1 replaces this condition.</p> <p><u>Emission Description</u> <i>Emission:</i> Saline intrusion into groundwater <i>Impact:</i> Potential for groundwater in the Onslow locality to be affected</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Ministerial Statements 401 and 451.</p>

Consequence: Minor
Likelihood: Possible.
Risk Rating: Moderate.

Regulatory Controls

OSPL provided a report to the Office of the Environmental Protection Authority (OEPA) with an assessment of the 10+ years of data, which provided evidence that the OS operation was not affecting the groundwater in Onslow. The OEPA referred the issue to the Department of Water (DoW) who advised that they are satisfied that the OSPL groundwater monitoring program can cease. The OEPA determined that the requirements of the groundwater monitoring conditions 14-2 (Ministerial Statement 401) and 12 (Ministerial Statement 451) had been met by OSPL.

Land development has accelerated in Onslow in more recent years, with the advent of several new gas operations and proposed expansions to residential and commercial areas of the town. It is likely that these factors will further influence groundwater regimes in the Onslow town site in the future.

Previous licence condition 7 relating to ambient groundwater monitoring has been removed.

N/A.	There are no specified conditions relating to improvements in this section.	N/A.
OSC.	<p>SC for the submissions of the Annual Environmental Report and Annual Audit Compliance Report. OSC L5.3.1 has been added to the licence regarding notification requirements.</p> <p>Previous licence conditions 14 and 15 have been removed as SC L5.2.1 and OSC L5.2.2 replace these conditions.</p> <p>The requirement (previous licence condition 14(ii)) to report the characteristic and volume of any discharges to the environment including bitterns has been modified to not include bitterns. Ambient monitoring is undertaken in the bitterns channel (OSC L3.8.1) to show sufficient mixing of bitterns in the natural environment. A flow meter is not installed at the bitterns channel. OSPL calculate bitterns discharged based on production figures. A requirement to include in the Annual Environmental Report the total amount (tonnes per year) of salt that was harvested and shipped and bitterns discharged during the annual period has been incorporated into Table 5.2.1.</p>	General provisions of the <i>Environmental Protection Act 1986</i> .



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
30/01/2012	Application advertised in The West Australian newspaper (reissue)	No comments received	N/A
23/02/2012	Proponent sent a copy of draft instrument (reissue)	No comments received	N/A
14/08/2014	Proponent sent a copy of draft instrument (amendment)		



6 Risk Assessment

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

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	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



Appendix A

Point source emissions to surface water including monitoring

Uncrystallised salts, mainly potassium and magnesium, known as bitterns, are released in a controlled manner through Middle Creek. OSPL have committed, as a condition of Ministerial Statement 451, to discharge bitterns only at half tide or higher via a discharge channel constructed with an invert level below the mangrove root zone to maximise dilution.

The discharge is managed via a tidal monitoring station at the end of the shiploader jetty and Beadon Creek, which sends an electronic signal to open and close the bitterns discharge gates at the appropriate tide levels. A default closed position is activated when the electronic signal is lost, which acts as a safety mechanism.

There is potential for spills to occur during bulk loading. Management includes control and clean up procedures during periods when ships are docked and product loading is being undertaken. OSPL ensures the bulk handler ceases if significant product spill to harbour is occurring.

Emission Description

Emission: Discharge of bitterns through Middle Creek and spillages of salt to the marine environment.

Impact: Higher salinity concentrations around the discharge channel and loading areas, which may impact on marine and mangrove communities.

Controls: OSPL discharge bitterns only at half tide or higher via a discharge channel in accordance with Ministerial Condition 451 and management procedures are in place during product loading.

Risk Assessment

Consequence: Minor.

Likelihood: Unlikely.

Risk Rating: Moderate.

Regulatory Controls

NSC L2.3.2 ensures that all salt, concentrated brine and saline constituents are only discharged to Middle Creek at half tide or higher via a discharge channel. OSPL are required to report in the Annual Environmental Report the total amount (tonnes per year) of salt that was harvested and shipped and bitterns discharged during the annual period and characteristics and volume of any discharges to the environment. Ambient surface water monitoring is undertaken six-monthly for Electrical Conductivity at Middle Creek and Offshore (condition L3.8.1.).

Residual Risk

Consequence: Insignificant.

Likelihood: Rare.

Risk Rating: Low.



Appendix B

Emissions to land including monitoring

Wastewater is collected from the light vehicle refuelling/washdown areas, heavy vehicle refuelling/washdown areas and the main workshop via a series of concrete sumps. Once collected, the wastewater is pumped to the wastewater treatment facility located at the vehicle washbay. The treated water is discharged to an unlined discharge channel.

OSPL have implemented the following waste management procedures:

- paper, food and general refuse will be stored in bins until collected /taken to the Shire Waste Disposal Area (weekly);
- oil will be stored onsite in dedicated waste oil tanks until collected/disposed of by a licensed contractor;
- hydrocarbon contaminated containers, soaker pads, rags etc. will be stored onsite in designated bins or containers until taken to the Shire Waste Disposal Area; and
- scrap metal, machinery components will be:
 - re-used where possible;
 - stored in the salvage yard according to type;
 - collected by a licensed contractor for recycling; and
 - taken to the Shire Waste Disposal Area.

The waste management hierarchy of elimination, reduction, reuse, recycling, treatment and disposal will be applied where possible.

Emission Description

Emission: Contaminated wastewater, waste and the potential risk of groundwater contamination.

Impact: Contamination of surrounding area.

Controls: Contaminated wastewater will be treated at the water treatment facility and waste will be disposed of in accordance with waste management procedures.

Risk Assessment

Consequence: Insignificant.

Likelihood: Possible.

Risk Rating: Low.

Regulatory Controls

SC L1.2.2 ensures the licensee operates and maintains all pollution control and monitoring equipment. NSC L1.3.1 and L1.3.2 ensures all washwater from the process plant is contained within the washpad area and collection drains, while collected washwater from the salt washing process must be directed to settlement ponds for recycling with any excess water pumped to the condenser ponds. NSC L1.3.3 ensures that a minimum freeboard of 300 mm is maintained on all outer levees.

OSC L2.5.2 has been added to the licence to ensure that Total Recoverable Hydrocarbons (TRH) in waters discharged to the wastewater discharge channel is below 15 mg/L and quarterly monitoring is undertaken.

Residual Risk

Consequence: Insignificant.

Likelihood: Unlikely.

Risk Rating: Low.