Licence

Licence number	L7178/1997/11
Licence holder	Dampier Salt Limited
ACN	008 706 590
Registered business address	Central Park Level 18, 152-158 St Georges Terrace PERTH WA 6000
DWER file number	DER2014/001046-2
Duration	04/10/2015 to 03/10/2025
Date of amendment	03/04/2020
Premises details	Dampier Salt – Lake Macleod Blowholes Road CARNARVON WA 6701 Part of Mining Tenements: AML 70/245, L09/10, L09/11, L09/17 and L09/18 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Category production or design capacity**	**Assessed premises production or design capacity**
Category 14: Solar salt manufacturing: premises on which salt is produced by solar evaporation.	Not applicable	6,100,000 tonnes per annual period
Category 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	84,000 tonnes per day
Category 64: Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	20 tonnes or more per year	60 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 3 April 2020, by:

Lauren Fox
Digitally signed by Lauren Fox
Date: 2020.04.03 07:59:38 +08'00'

Lauren Fox
A/MANAGER, RESOURCE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Introduction

This Introduction is not part of the licence conditions.

DWER's industry licensing role

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

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (EP Act) for the licensing of prescribed premises. Through this process DWER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER 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 EP 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/licence holder 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 EP Act and any other statutory instrument. Legislation can be accessed using the following link:

https://www.legislation.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 EP 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 EP 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

The Lake MacLeod site has operated since the 1960's under the *Evaporites (Lake MacLeod) Agreement Act 1967*, Dampier Salt Limited took control of the premises in 1978. The premises is located within the Shire of Carnarvon and is approximately 50km north of Carnarvon. It is located on part of Mining Tenements: AML 70/245, L09/10, L09/11, L09/17 and L09/18, which covers approximately 220,000ha of land, covering the majority of Lake MacLeod.

Category 14 & 58A– Gypsum mining, salt manufacturing and bulk loading operations

Gypsum mining is carried out on the premises by excavation of raw gypsum from the lake surface. This is achieved through using an excavator and truck mining method. Following excavation, heap leaching of the gypsum stockpiles occurs with sprinklers using bore and fresh water (the latter produced from bore water using the reverse osmosis plant at the gypsum facility) on two gypsum leach pads. This washes sodium chloride (salt) minerals from the gypsum stockpiles to the required levels of less than 150 parts per million chloride. The gypsum is then transported to Cape Cuvier where it is stockpiled and shipped at an annual production rate of approximately 500,000 tonnes per annum.

The saturated brine contained in Lake MacLeod is approximately 10 times saltier than normal seawater, eliminating the need for a series of concentration ponds normally required at other salt mines to evaporate water to reach "salting" point (sodium chloride saturation).

A collection ditch has been cut into the halite layer to recover brine from Lake MacLeod. The brine is pumped at an average rate of 55 m^3/min from the collection ditch into 8.5km of transport channel to a common collection point. There are thirty three crystallisers, averaging 23ha each, used for salt production. Once deposited in the crystallising ponds the brine is further evaporated and salt is deposited on top of a pre-formed floor of salt. Deposition is stopped by draining the remaining brine when about three quarters of the sodium chloride has been deposited and before other salts come out of solution in significant quantities. The residual brine is called bitterns and contains high concentrations of potassium, magnesium and other salts. Bitterns are discharged from the crystallisers into a holding pond on the lake's surface where the water is evaporated. The resulting solid bitterns represent a significant resource which is also harvested.

Harvesting of salt is carried out using a laser controlled salt cutter with an average capacity of 1,000 tonnes per hour discharging directly into three 60 tonne trailers hauled by a prime mover. The harvested salt is then washed at the salt wash plant to remove impurities off the salt. Once washed the salt is stockpiled and allowed to drain for approximately six weeks for the moisture content to fall below 2.5%. Once the salt has finished draining, it is hauled by road trains, 24km to a 200,000 tonne stockpile at Cape Cuvier for shipment. Reclaim for ship loading is by dozers which push the salt into a hopper, which then feeds to a conveyor system under the stockpile. The conveyor system transports the salt to the ship loader which feeds the salt onto the vessel at the wharf.

Category 64 - Landfill

The Lake Macleod operation disposes of inert waste and tyres at a landfill area on the premises. Some putrescible waste, in the form of used timber, is also disposed of at the landfill. All other wastes, including putrescible waste from the offices and crib rooms, are sent off site to the Shire of Carnarvon landfill facility in Carnarvon. The landfill facility uses a deep trench of around 3 to 4m deep to dispose of waste.

Amendment February 2020

Licence holder initiated amendment

Dampier Salt Limited (licence holder) submitted a licence amendment application to remove Condition 3.4 relating to Acid Sulfate Soil (ASS) field testing at Dampier Salt – Lake MacLeod (premises).

DWER initiated amendment - amalgamation of licence and amendment notices

The Chief Executive Officer (CEO) of DWER has amended licence L7178/1997/11 in accordance with section 59 of the EP Act, as set out in this amendment report. The licence document (L7178/1997/11) has been updated accordingly to reflect this amendment.

This licence amendment is limited only to:

- reflect the removal of conditions relating to ASS field testing;
- incorporate the amendment notices 1 and 2 issued in March 2018 and November 2018 respectively, as listed in the licence amendment history (Table 2);
- update the style and appearance of the licence;
- include definitions for measurement abbreviations to enable measurements to be listed in their abbreviated form;
- delete the redundant AACR form set out in schedule 2;
- include Included a copy of the current N1 form ;and
- correct clerical mistakes and unintentional errors.

The incorporation of the amendment notices does not change the obligations of the Dampier Salt Limited (licence holder) and no additional risk assessment has been undertaken in consolidating the notices.

This licence amendment has been informed by the department's Regulatory Framework which is available at https://dwer.wa.gov.au/regulatory-documents.

The licences and works approvals issued for the premises since 4 October 2010 are:

Licence history

Issued	Instrument number	Summary of changes
4 October 2010	L7178/1997/10	Licence reissue
22 November 2012	W5269/2012/1	Works approval for gypsum operations.
20 March 2014	W5269/2012/1	Works approval amendment to increase production capacity of gypsum operations.
1 October 2015	L7178/1997/11	Licence reissue: • to change the format of the licence and the addition of discharge points to land and surface water; • increase in solar salt production from 2.9Mtpa to 3.1Mtpa; and • the reinstatement of Category 80 for gypsum production.

Issued	Instrument number	Summary of changes
20 March 2018	L7178/1997/11	Amendment Notice 1: • to increase gypsum production capacity and reclassify gypsum production as a Category 14 and Category 58A; • amendment to monitoring program for discharges to Lake Macleod; and • addition of Acid Sulfate Soil investigation and management conditions.
15 November 2018	L7178/1997/11	Amendment Notice 2: • to allow for the addition of emission point SW11 for the dewatering of Lake MacLeod; • to allow for the relocation of discharge points as gypsum mining expands within the proposed mining area; • addition of trigger criteria for management actions, associated with discharges to Lake Macleod; and • amendment to Acid Sulfate Soil monitoring and management conditions.
3 April 2020	L7178/1997/11	• Removal of conditions relating to ASS field testing. • Amalgamation of the licence with amendment notices 1 and 2.

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 EP Act apply unless the contrary intention appears.

1.1.2 In this licence, the terms in Table 1 have the meanings defined.

Definitions

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
AACR	Annual Audit Compliance Report means a report in a format approved by the CEO as presented by the licence holder or as specified by the CEO from time to time and published on the department's website.
AER	Annual Environmental Report
annual period	means the inclusive period from 1 January until 31 December in the same year.
approved form	the AACR Form template approved by the CEO for use and available via DWER's external website.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.*
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made.*
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.9 *Water Quality – Sampling – Guidance on sampling of rivers and streams.*
AS/NZS 5667.9	means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of marine waters.*
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters.*

Term	Definition
Category/Categories	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations.
CEO	means Chief Executive Officer of the Department of Water and Environmental Regulation. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
clean fill	has the meaning defined in Landfill Definitions.
Delegated Officer	an officer delegated under section 20 of the EP Act.
department	the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Gypsum Operations Dust Management Plan	means Gypsum Operations Dust Management Plan JA- MPL-1462, Rio Tinto, Dampier Salt Limited, Version 3.0, Last reviewed 30 September 2015.
ha	hectare
inert waste type 1	has the meaning defined in Landfill Definitions.
inert waste type 2	has the meaning defined in Landfill Definitions.
km	kilometres
Landfill Definitions	means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.
licence	means this licence numbered L7178/1997/11 and issued under the EP Act.
licence holder	Dampier Salt Limited

Term	Definition
m	metres
mg/L	milligrams per litre
mg/L $CaCO_3$	milligram per litre as calcium carbonate
Minister	the Minister responsible for the EP Act and associated regulations.
mm	millimetres
µS/cm	microsiemens per centimetre
m^3	cubic metres
m^3/min	cubic metres per minute
monthly period	means a one-month period commencing from day 1 of a month until day 1-1 of the immediately following month. *e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."*
Mtpa	million tonnes per annum
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.
putrescible	has the meaning defined in Landfill Definitions.
premises	means the area defined in the premises map in Schedule 1 and listed as the premises details on page 1 of the licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Schedule 1	means Schedule 1 of this licence unless otherwise stated.
Schedule 2	means Schedule 2 of this licence unless otherwise stated.

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.

1.1.5 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 General conditions

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

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

1.2.3 The licence holder 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]

Note[1]: *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 licence holder shall ensure that where wastes produced on the premises is not taken offsite for lawful use or disposal, they are managed in accordance with the process requirements in Table 1.3.1.

Table 1.3.1: Waste processing

Waste type	Process(es)	Process limits[1, 2]
• Inert waste type 1 • Inert waste type 2 • Clean fill • Putrescible wastes	Handling, associated storage and disposal of waste by landfilling	<u>All waste types</u> • No more than 60 tonnes per year of all waste types cumulatively shall be disposed of by landfilling; • Disposal of waste by landfilling shall only take place within the landfill area shown on the Map of landfill area (Figure 2 in Schedule 1). • Waste shall be placed in a defined trench or within an area enclosed by earthen bunds, and • The tipping area is to be no greater than 2m in height above ground level. <u>Special waste type 2 (tyres)</u> • Tyres are to be covered at regular intervals such that no more than 1,000 tyres are left exposed at any one time; and • Batches of tyres should be separated from each other by at least 100mm of soil with each batch consisting of not more than 1,000 whole tyres or 40m^3 of tyre pieces.

Note [1]: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987* (EP Regulations).

Note [2]: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.3.2 The licence holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.3.2 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.3.2: Cover requirements[1]

Waste type	Material	Depth	Timescales
• Clean fill • Inert waste type 1 • Inert waste type 2 • Putrescible wastes	Inert waste type 1 or soil	-	As soon as practicable after deposit and prior to compaction.
Inert waste type 2 (tyres)		1,000mm	

Note: Additional requirements for the covering of tyres are set out in Part 6 of the EP Regulations.

1.3.3 The licence holder shall take all reasonable and practical measures to ensure that no windblown waste escapes from the premises and that wind-blown waste is collected on at least a monthly basis and returned to the tipping area.

1.3.4 The licence holder shall ensure that there are no fires at the landfill facility.

1.3.5 The licence holder shall ensure that bitterns is only discharged into containment ponds with the relevant infrastructure requirements specified in Table 1.3.5.

Table 1.3.5: Containment infrastructure

Containment cell or dam number(s)	Material	Infrastructure requirements
Bitterns holding ponds as shown on map of containment infrastructure location (Figure 4 in Schedule 1).	Bitterns	<u>Bitterns holding area</u> • Engineered earthen levee designed to protect the salt field from flooding of the Lake. • Levee is selectively rock armoured on outer wall to minimise erosion during flood events.

1.3.6 The licence holder shall ensure that:

(a) hydrocarbon contaminated soil remediation occurs in landform cells;

(b) leachate from the landform cells and stormwater run-off that has come into contact with the soil shall be directed to a collection sump; and

(c) the collection sump is capable of storing (as a minimum) run-off from a 1 in 10 year rainfall event.

1.3.7 The licence holder must:

(a) reduce the drop height of gypsum at the ship loader to as low as reasonably practicable; and

(b) transfer gypsum to Stockpile 2 using a stacker equipped with a chute; for the purpose of reducing the exposure of gypsum to wind.

2 Emissions

2.1 General conditions

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

2.2 Point source emissions to surface water

2.2.1 The licence holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.2.1 as identified on the maps of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 2.2.1: Emission points to surface water

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
SW1	Discharge point 1 (wet salt stockpile discharge)	Outlet pipe into Lake MacLeod from wet salt stockpile.	Wet salt stockpile discharge of excess water to Lake MacLeod.
SW2	Discharge point 2 (wet salt stockpile discharge)		
SW3	Discharge point 3 (wash plant brine overflow)	Overflow pipe into Lake MacLeod from Wash Plant.	Salt wash brine from Wash Plant overflow point.
SW4	Discharge point 4 (Truckwaste, lube bay & reverse osmosis plant Discharge Point)	Unlined pond on Lake MacLeod from which truck wash bay, Lube bay and Reverse Osmosis plant (at salt operations) discharge into.	Wastewater from truck wash bay via a triple interceptor.
SW5	SW5	Outlet pipe into ocean from truck wash bay at Cape Cuvier.	Wastewater from truck wash bay via a triple interceptor.
SW6	SW6	Outlet pipe into Lake MacLeod from Gypsum Stockpile 1.	Wastewater from heap leach pad for Gypsum Stockpile 1.
SW7	SW7	Outlet pipe into Lake MacLeod from Gypsum Stockpile 8 drainage system.	Wastewater from heap leach pad for Gypsum Stockpile 8.
SW8	SW8	Outlet pipe into Lake MacLeod from in-situ drainage systems.	Wastewater from in-situ heap leach areas located within Lake MacLeod.
SW11	SW11		
Mine Block 18	SW9 & SW10		

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
Mine Block 19	SW15		
Mine Block 20	SW14		
Mine Block 21	SW13		
Mine Block 22	SW11 & SW12		
Mine Block 23	SW16 & SW17		

2.2.2 The licence holder must:

(a) not cause or allow point source emissions to surface water greater than the limits listed in Table 2.2.2; and

(b) perform the management actions specified in Table 2.2.2 where Trigger Criteria is exceeded.

Table 2.2.2: Point source emission limits and management trigger criteria to surface water

Emission point reference	Parameter	Limit (including units)	Trigger criteria	Averaging period	Management actions
SW4 SW5	Total recoverable hydrocarbons	15 mg/L	N/A	Spot sample	N/A
SW6 SW7 SW8 SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16 SW17	pH[1] Titratable acidity[1]	N/A	pH <6; and Titratable acidity >100 mg/L $CaCO_3$	Monthly	The licence holder must: • aerate leachate to precipitate dissolved iron and directed to a series of settlement basins/trenches; and/or • undertake neutralisation treatment (liming); and/or • relocate the disturbance area to another location.

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

2.2.3 The licence holder must only discharge leachate from mine blocks, depicted in Schedule 1, from a maximum of two emission points at any one time.

2.3 Emissions to land

2.3.1 The licence holder shall ensure that where waste is emitted to land from the emission points in Table 2.3.1 and identified on the maps of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Table 2.3.1: Emissions to land

Emission point reference	Emission point reference and location on Map of emission points	Description	Source including abatement
L1	Discharge point 6 (Biomax Irrigation Area)	Biomax treated wastewater irrigation area.	Treated wastewater from Biomax sealed aerobic treatment unit.
L2	Discharge point 7 (Lab Neutralisation Pit)	Seepage from unlined neutralisation pit.	Wastewater discharged from laboratory to pit to be chemically treated.
L3	Gypsum Discharge point 3	Outlet pipe into infiltration sump from gypsum fuel facility and truckwash.	Wastewater from gypsum fuel facility and truckwash triple interceptor.

2.3.2 The licence holder shall not cause or allow point source emissions to land greater than the limits listed in Table 2.3.2.

Table 2.3.2: Point source emission limits to land

Emission point reference	Parameter	Limit (including units)	Averaging period
L3	Total recoverable hydrocarbons	15mg/L	Spot sample

2.4 Fugitive emissions

2.4.1 The licence holder shall ensure fugitive emissions are managed in accordance with the documents, or parts of documents, specified in Table 2.4.1.

Table 2.4.1: Management plans

Management plan reference	Parts	Date of document
Gypsum Operations Dust Management Plan	All	30 September 2015

3 Monitoring

3.1 General monitoring

3.1.1 The licence holder shall ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;

(c) all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant; and

(d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

3.1.2 The licence holder shall ensure that:

(a) monthly monitoring is undertaken at least 15 days apart; and

(b) quarterly monitoring is undertaken at least 45 days apart.

3.2 Monitoring of point source emissions to surface water

3.2.1 The licence holder shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to surface water

Emission point reference	Parameter	Units	Frequency
SW4	Total recoverable hydrocarbons	mg/L	Quarterly
SW5			
SW6 SW7 SW8 SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16 SW17	Chloride, sulfate, sodium, magnesium, potassium, calcium, total suspended solids, arsenic, beryllium, boron, cadmium, chromium, copper, fluoride, lead, mercury, nickel, total nitrogen, total phosphorus, selenium, bicarbonate	mg/L	Quarterly
	Electrical conductivity[1]	µS/cm	Quarterly
	pH[1]	-	Monthly
	Titratable acidity[1]	mg/L	Monthly

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

3.3 Monitoring of emissions to land

3.3.1 The licence holder shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
L3	Total recoverable hydrocarbons	mg/L	Quarterly

4 Information

4.1 Records

4.1.1 All information and records required by the licence holder 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 4.1.1(d) be retained for at least six 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.

4.1.2 The licence holder 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.

4.1.3 The licence holder shall complete an Annual Audit Compliance Report (AACR) indicating the extent to which the licence holder has complied with the conditions of the licence, and any previous licence issued under Part V of the EP Act for the premises for the previous annual period.

4.1.4 The licence holder 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.

4.2 Reporting

4.2.1 The licence holder shall submit to the CEO an Annual Environmental Report (AER) within 120 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	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
Table 3.2.1	Discharge to water monitoring results	
Table 3.3.1	Discharge to land monitoring results	
4.1.3	Compliance	Annual Audit Compliance Report (AACR) [1]
4.1.4	Complaints summary	None specified

Note [1]: The AACR Form template approved by the CEO for use and available via DWER's external website.

4.2.2 The licence holder shall ensure that the Annual Environmental Report also contains:

(a) an assessment of the information contained within the report against previous monitoring results and licence limits; and

(b) a list of any original relevant monitoring reports submitted to the licence holder from third parties for the annual period and make these reports available on request.

4.3 Notification

4.3.1 The licence holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
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 Part B: As soon as practicable	N1

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

Note [2]: Forms are in Schedule 2

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

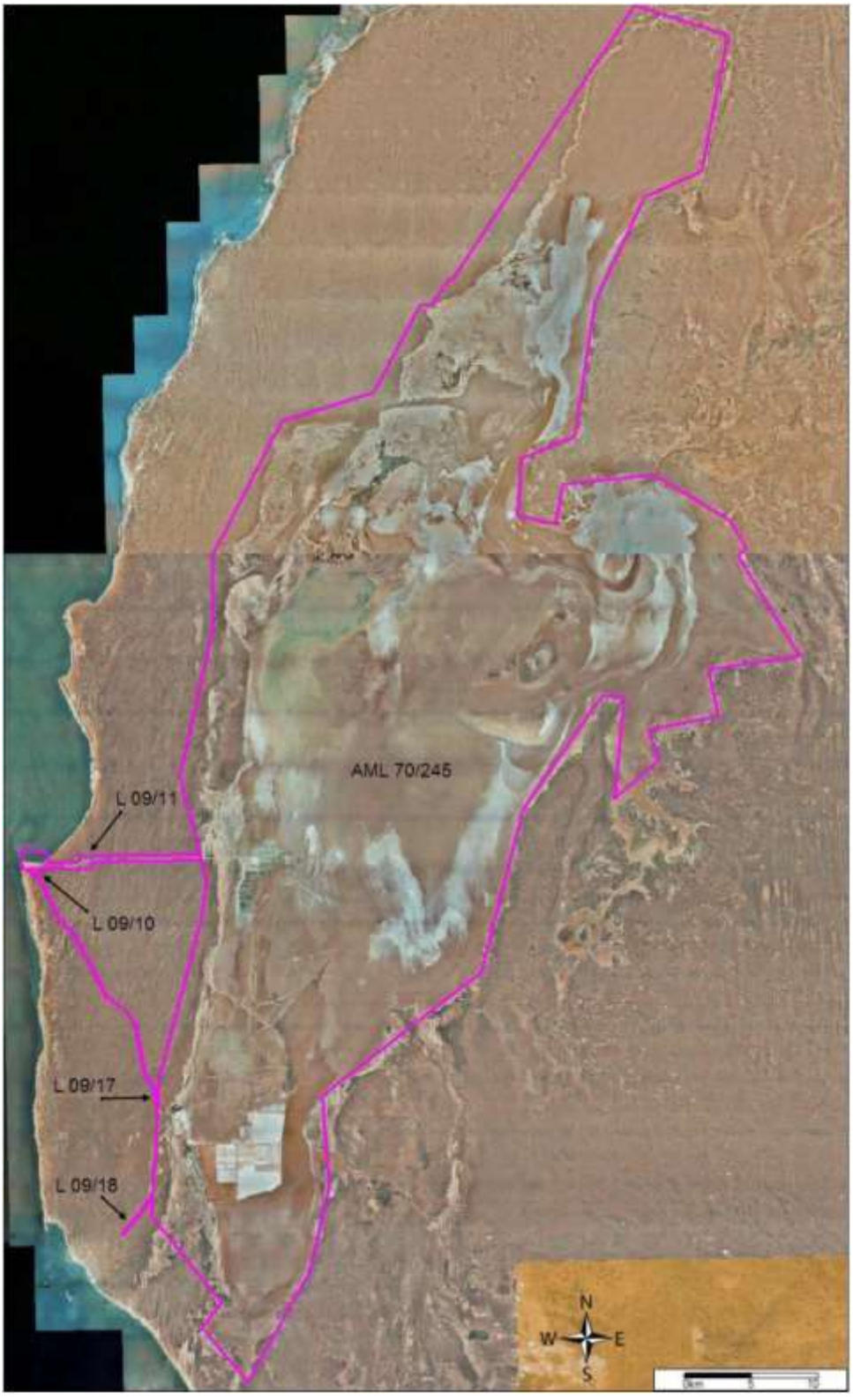


Figure 1: Map of the boundary of the prescribed premises

Premises boundary

The premises boundary is defined by the coordinates in Table 2.

Table 2: Premises boundary coordinates

Easting	Northing
AML70/245	
790286.9	7388044.7
797255.5	7385445.0
795055.9	7374346.4
790666.2	7372296.7
786836.2	7363847.2
785037.2	7352768.2
780996.1	7351047.3
780616.2	7346437.1
783416.2	7345627.2
784076.1	7348907.3
790986.1	7349527.3
796636.2	7345647.4
797796.3	7343327.4
797106.3	7342832.4
801616.2	7334497.4
794726.3	7333497.5
795386.3	7329687.6
790086.5	7328647.6
790836.6	7326177.7
787436.8	7323067.8
788326.5	7331397.5
786636.5	7331497.4
780587.3	7322347.5
777178.7	7309058.5
765072.6	7299228.3
765444.5	7291700.4
763817.1	7284802.4
759032.2	7275884.7
755702.1	7280331.2

Easting	Northing
757210.6	7282351.0
752082.0	7289643.1
752194.3	7291304.6
752216.3	7291610.6
752218.2	7291637.7
752306.4	7292871.8
752322.4	7293096.3
752437.4	7294613.6
752438.7	7294632.5
752705.8	7298371.4
752725.2	7298643.0
752784.2	7299467.9
751756.5	7301061.8
751285.3	7304325.0
751168.3	7305105.6
750463.3	7306364.0
749048.6	7307497.9
748349.8	7308991.5
748215.5	7309324.7
747999.3	7309750.5
746538.6	7312895.4
745980.4	7313474.8
745472.8	7314168.8
744859.6	7315670.0
744495.0	7316539.7
743943.3	7317531.9
743280.9	7318146.9
743013.8	7318146.9
742881.2	7318147.0
742880.1	7318951.6

Easting	Northing
742892.9	7319756.2
744684.6	7319528.0
744940.1	7318893.6
744985.2	7318781.6
744880.3	7318647.0
744490.4	7318146.8
743680.5	7318146.9
743398.4	7318146.9
744007.1	7317581.9
744567.1	7316574.6
744933.7	7315700.2
745543.1	7314208.1
746041.7	7313526.5
746605.5	7312941.3
748070.5	7309786.9
748288.4	7309357.8
748423.2	7309023.5
749113.2	7307548.7
750525.6	7306416.7
751245.4	7305132.0
751364.6	7304335.8
751833.1	7301090.5
752793.7	7299600.8
752876.1	7300755.6
752883.7	7300862.2
756140.0	7313444.1
756739.0	7316884.2
754837.0	7325634.0
757565.5	7337345.4
757634.9	7343595.1
763015.3	7354427.5
770035.9	7356697.5
773636.3	7363757.6

Easting	Northing
774556.3	7363747.6
775786.4	7365867.5
776086.4	7365837.5
790286.9	7388044.7
L09/10	
744066.1	7318146.9
744053.7	7317431.9
744023.4	7317411.0
743892.4	7317524.3
743656.8	7317682.9
743562.9	7317772.7
743189.9	7318146.9
743680.5	7318146.9
744066.1	7318146.9
L09/11	
756245.5	7319147.0
756354.1	7318647.0
748136.1	7318646.9
748136.2	7318146.9
744490.4	7318146.8
744880.3	7318647.0
747136.1	7318646.7
747136.1	7319146.9
756245.5	7319147.0
L09/18	
752208.4	7291269.5
752197.7	7291120.2
750774.3	7289188.3
749865.9	7288026.6
749819.8	7288097.5
750710.7	7289236.7
752208.4	7291269.5

Landfill area map

The landfill area is shown in the map below (Figure 2).

Figure 2: Map of landfill area

Cape Cuvier infrastructure map

The Cape Cuvier infrastructure is shown in the map below (Figure 3).

Figure 3: Map of Cape Cuvier infrastructure

Map of containment infrastructure locations

The map of the containment infrastructure areas as defined in Table 1.3.5 are shown in the map below (Figure 4).

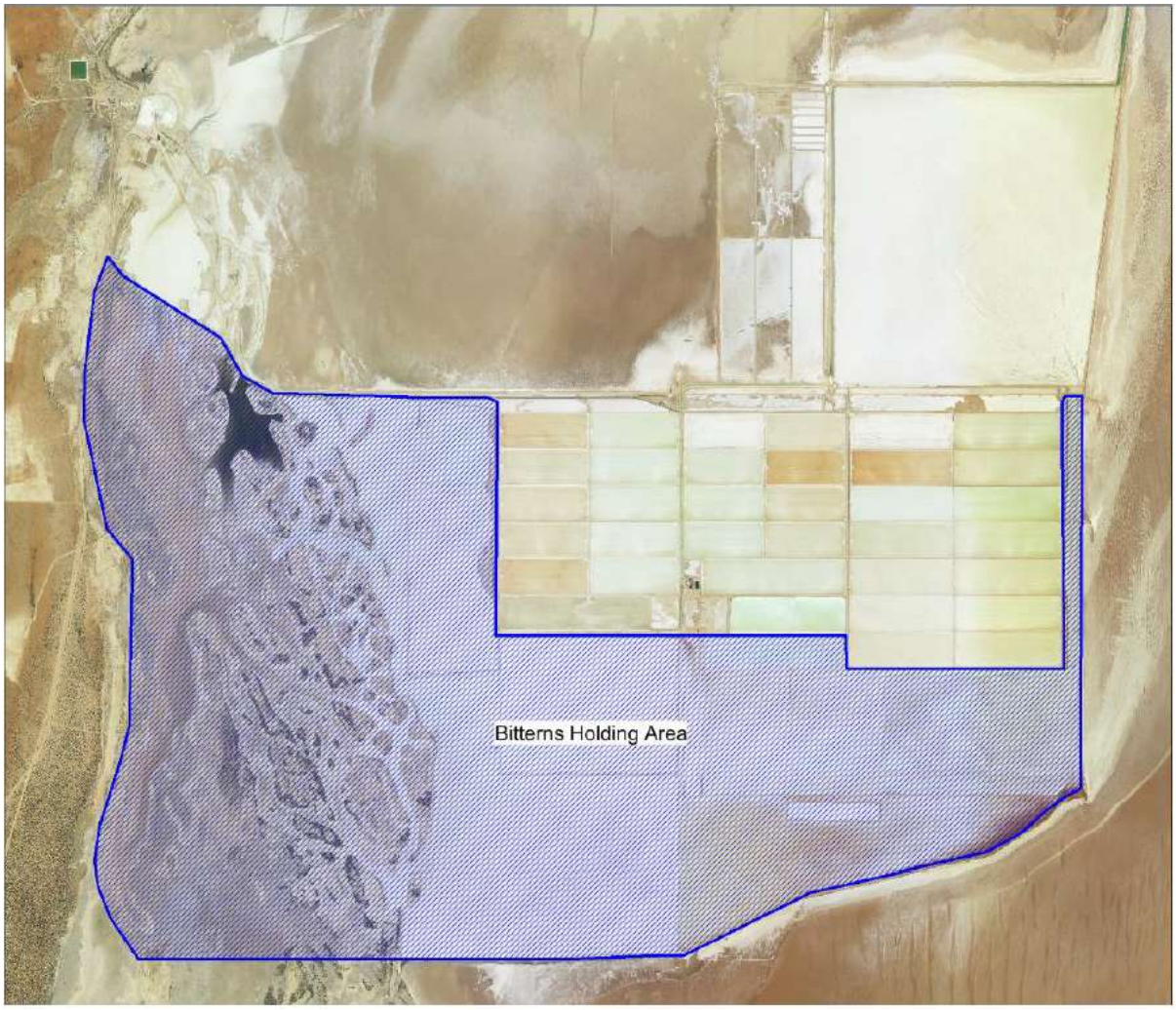


Figure 4: Map of containment infrastructure location

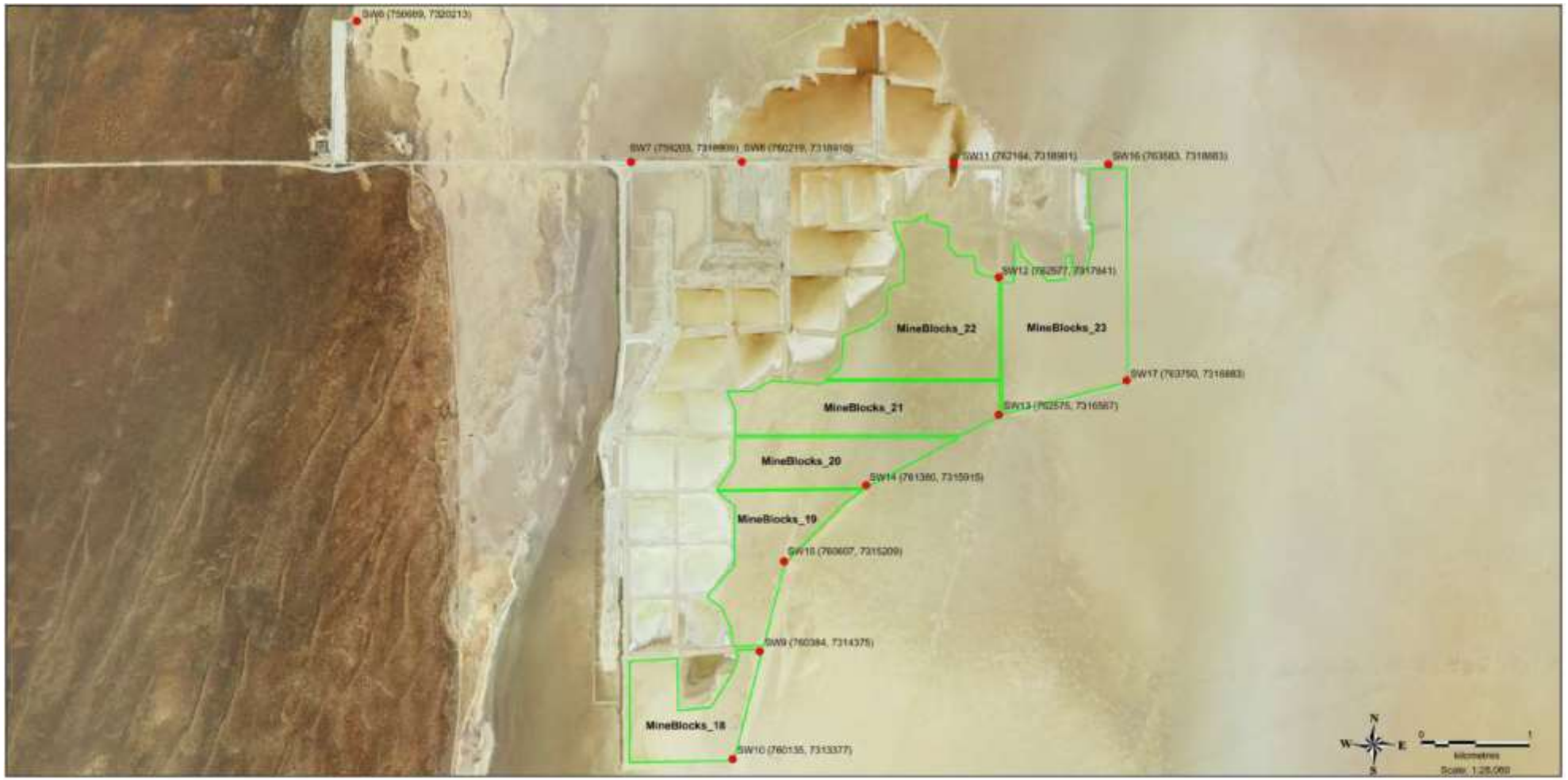
Emission points maps

The locations of the emission points defined in Tables 2.2.1, 2.2.2, 2.3.1 and 2.3.2 are shown in the maps below (Figure 5,Figure 6, Figure 3, Figure 7 and Figure 8).

Figure 5: Map of emission points

Figure 6: Map of emission points

Figure 7: Map of emission points



Legend

- Surface Water Emission points (MGA coordinates)
- Future Gypsum Mine block areas (MB18 – MB23)

Figure 8: Map of emission points

Schedule 2: Reporting & notification forms

Government of Western Australia
Department of Water and Environmental Regulation

Licence:	Licence holder:
Form: N1	Date of breach:

Notification of detection of the breach of a limit.

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	

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 licence holder	
Date	