

Licence number L9253/2020/3

**Licence holder** Mardie Minerals Pty Ltd

**ACN** 152 574 457

Registered business address Level 2

1 Altona Street

WEST PERTH WA 6005

**DWER file number** DER2020/000168

**Duration** 25/09/2024 to 24/09/2044

**Date of issue** 24/09/2024

Premises details Mardie Trial Project

Legal description -

Mining Tenement M08/526 as defined by the premises boundary coordinates in Schedule 1

Table 6

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
Category 14 Solar salt manufacturing: premises on which salt is produced by solar evaporation	137 tonnes per annum

This amended licence is granted to the licence holder, subject to the attached conditions, on 24 September 2024 by:

Neville Welsh SENIOR INDUSTRY LICENSING OFFICER INDUSTRY REGULATION

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

# **Licence history**

Date	Reference number	Summary
04/01/2019	W6172/2018/1	Works Approval granted
		Amendment for construction and operation of additional crystalliser ponds to the east of the facility.
22/10/2021	L9253/2020/1	Amendment for the replacement of a water cart with a fixed sprinkler system for dust suppression.
		Amendment for the removal of 'operation in accordance with manufacturers specifications' for multiple items of infrastructure.
21/09/2022	L9253/2020/2	Renewal of Licence for two years
24/09/2024	L9253/2020/3	Renewal of Licence with twenty year duration.

# Interpretation

#### In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## Licence conditions

The Licence Holder must ensure that the following conditions are complied with:

**1.** The licence holder shall ensure the premises production limits specified in Table 1 are not exceeded.

**Table 1: Production capacity limits** 

Category	Premises production limit
14: Solar salt manufacturing	137 tonnes per annual period

## **Infrastructure and equipment (Construction)**

- 2. The licence holder must construct and/or install the infrastructure listed in Table 2, in accordance with;
  - (a) the corresponding design and construction requirement / installation requirement; and
  - (b) at the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,

as set out in Table 2.

Table 2: Design and construction requirements / installation requirements

Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
4 x Crystallizer ponds	high permeable gravel from surface removed	Within green outlined area as shown in Schedule1, Figure 2
	<ul> <li>Contained within bunded area;</li> </ul>	rigure 2
	<ul> <li>Bunds to be constructed to at least 4.2 metre AHD;</li> </ul>	
	<ul> <li>All crystallizer ponds to be lined with a 1 mm HDPE lining;</li> </ul>	
	<ul> <li>Pond wall to contain 2m high clay core;</li> </ul>	
	<ul> <li>Pond wall clay core to be covered with compactable general fill material; and</li> </ul>	
	<ul> <li>Outside of bund wall to be covered with light weight rock armor.</li> </ul>	

## **Environmental Compliance Report**

- 3. The licence holder must within 30 days of each item of infrastructure required by condition 2 being constructed:
  - (a) undertake an audit of their compliance with the requirements of condition 2; and
  - (b) prepare and submit to the CEO an audit report on that compliance.

- **4.** The report required by condition 3, must:
  - (a) be certified by a suitably qualified professional engineer that each item of infrastructure listed in Table 2 meets the corresponding specifications and at the locations set out in Table 2 and has been constructed with no material defects;
  - (b) contain as constructed plans for the works that show the profile of all pond infrastructure; and
  - (c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person within the company.

## **Infrastructure and equipment (Operation)**

**5.** The Licence Holder must ensure that the site infrastructure and equipment listed in Table 3 is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

**Table 3: Infrastructure and equipment requirements** 

Site infrastructure and equipment	Operational requirement
Inlet screen of seawater inlet system	To be maintained regularly to ensure screen is free of debris.
Diesel generators for intake pump and office	To be located above the stormwater inundation level of 3.5 m AHD;
	Diesel supply tanks to be located upon bunded pallets with sufficient storage to adequately contain a spill from the tank;
	To be removed prior to cyclonic activity and stored and secured at the trial pond Premises; and
	To be maintained and routinely serviced.
HDPE liners of pipeline, evaporation ponds and crystallizers	To be maintained to be free of leaks and defects and in accordance with the manufacturer's specifications.
Evaporation ponds and crystallizers	Embankments adequately maintained to provide a minimum freeboard of 300 mm per pond and crystallizer.
Stainless steel pan evaporators	To be maintained to be free of leaks and defects.
Fixed sprinkler system and/or water carts for dust	Located in the areas as defined as 'Sprinklers' in Schedule 1 Figure 2.
suppression	<ul> <li>Infrastructure and Equipment to be maintained and regularly inspected for leaks and malfunctions.</li> </ul>
	Operated so that spray over drift does not impact on the surrounding environment.
	Water Cart may substitute for the fixed sprinkler system within the same operational area as defined in Schedule 1 Figure 2.

- **6.** The licence holder shall repair any damage to items of infrastructure listed in Table 3 within two (2) working days of its discovery.
- 7. The licence holder must ensure that the emissions of brine for the purpose of dust suppression are discharged only within the Premises boundary.

## **Monitoring**

**8.** The licence holder shall undertake the monitoring in Table 4 in accordance with the specifications in that table.

**Table 4: Monitoring of outputs** 

Output	Parameter	Units	Frequency
Waste outputs	Bitterns for the purpose of analysis	Tonnes or m <sup>3</sup>	Each load leaving the premises
	Bitterns for the purpose of dust suppression		Each load applied within the premises

## **Records and reporting**

#### Records

- 9. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **10.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
  - (a) the calculation of fees payable in respect of this licence;
  - (b) the works conducted in accordance with condition 2 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 5 of this licence;
  - (d) monitoring programmes undertaken in accordance with condition 8 of this licence; and
  - (e) complaints received under condition 9 of this licence.
- **11.** The books specified under condition 10 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the licence holder for the duration of the licence; and
  - (d) be available to be produced to an inspector or the CEO as required.

### Department of Water and Environmental Regulation

## Reporting

- **12.** The licence holder must:
  - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - (b) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 1 August each year.

# **Definitions**

In this licence, the terms in Table 5 have the meanings defined.

**Table 5: Definitions** 

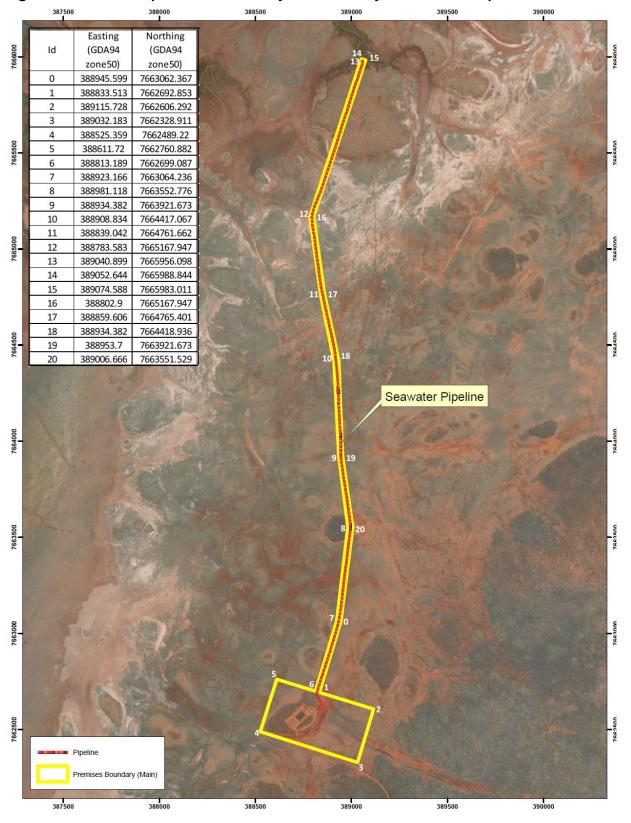
Term	Definition
ACN	Australian Company Number
AHD	Australian Height Datum
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12-month period commencing from 01 July until 30 June of the immediately following year.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department.  "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
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.

### **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

Figure 1: Prescribed premises boundary is shown in yellow in the map below



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Figure 2: Proposed layout of the new crystalliser ponds

# **Premises boundary coordinates**

The premises boundary is defined by the coordinates in Table 6.

**Table 6: Premises boundary coordinates** 

Easting	Northing	Zone
388945.599	7663062.367	50
388833.513	7662692.853	50
389115.728	7662606.292	50
389032.183	7662328.911	50
388525.359	7662489.22	50
388611.72	7662760.882	50
388813.189	7662699.087	50
388923.166	7663064.236	50
388981.118	7663552.776	50
388934.382	7663921.673	50
388908.834	7664417.067	50
388839.042	7664761.662	50
388783.583	7665167.947	50
389040.899	7665956.098	50
389052.644	7665988.844	50
389074.588	7665983.011	50
388802.9	7665167.947	50
388859.606	7664765.401	50
388934.382	7664418.936	50
388953.7	7663921.673	50
389006.666	7663551.529	50