



Licence number	L6593/1995/8
Licence holder	Kemerton Silica Sand Pty Ltd
ACN	067 603 552
Registered business address	5/363-367 Albany Highway VICTORIA PARK WA 6100
DWER file number	DER2014/000467
Duration	14/03/2013 to 20/03/2025
Date of amendment	23/01/2020
Premises details	Kemerton Silica Sand Mine Rhodes Road WOKALUP WA 6221 Legal description - Lot 250 on Plan 405458

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which – (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	1,400,000 tonnes per annual period

This amendment is granted to the licence holder, subject to the attached conditions, as amended on 23 January 2020, by:

Tim Gentle
MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES

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

Licence history

Date	Instrument	Summary of changes
17/05/1995	W1232	Works approval issued for mine establishment. Issued to Gwalia Consolidation Ltd.
22/05/1996	L6593	First operating licence. Issued to Gwalia Consolidated Ltd.
04/07/1997	L6593/1	Licence reissue. Throughput amended to reflect that approved in Ministerial Statement 366.
24/11/1998	W2595	Works approval for the construction of a second sand processing module and stockpile. Issued to Sons of Gwalia Ltd.
24/11/1998	L6593/3	Licence reissue.
12/05/1999	L6593/3	Licence reissue.
19/03/2001	L6593	Amendment to change occupier to Kemerton Silica Sand Pty Ltd.
21/03/2002	L6593/1	Licence reissue.
21/03/2003	L6593/7	Licence reissue.
15/03/2004	L6593/3	Licence reissue.
10/03/2005	L6593/4	Licence reissue. First non-annual licence, issued for 5 years.
18/03/2010	L6593/1995/7	Licence reissue. Issued for 3 years.
14/03/2013	L6593/1995/8	Licence reissue and conversion to new REFIRE format.
20/03/2014	L6593/1995/8	Licence amendment to give effect to the Minister's 14 January 2014 appeal determination.
17/03/2016	L6593/1995/8	Licence amendment to extend the expiry date for a further 12 months, to allow time for detailed licence review and consultation process. Redundant conditions removed.
16/02/2017	L6593/1995/8	Amendment Notice 1 – extend licence duration by 12 months.
09/02/2018	L6593/1995/8	Amendment Notice 2 – extend licence duration by 12 months.
03/07/2018	L6593/1995/8	Amendment Notice 3 – amend premises boundary following land transfer required by MS 916.
25/02/2019	L6593/1995/8	Amendment Notice 4 – extend licence duration by 12 months.
23/01/2020	L6593/1995/8	Licence amendment to extend licence duration by 5 years (this amendment).

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 means the version of the standard, guideline, or code of practice in force at the time of granting of this licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the licence;
- (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:

Premises operation

1. The licence holder must ensure that process overflow and tailings are only discharged into the infrastructure specified in Table 1.

Table 1: Containment infrastructure table

Infrastructure	Material	Infrastructure requirements
Dredge pond	ROM stacker overflow and process tailings	Nil.

2. The licence holder must manage the dredge pond such that:
 - (a) a top of embankment freeboard of at least 500 mm is maintained;
 - (b) overtopping does not occur, except as a result of an extreme rainfall event; and
 - (c) groundwater mounding is less than 1 metre from natural ground level.
3. The licence holder must undertake inspections of the scope and type and at the corresponding frequency specified in Table 2.
4. Where any inspection required by condition 3 identifies that an appropriate level of environmental protection is not being maintained, the licence holder must:
 - (a) take corrective action to mitigate adverse environmental consequences as soon as practicable; and
 - (b) maintain a written log of all inspections undertaken, with each inspection signed off by the person who conducted the inspection.

Table 2: Inspection of infrastructure requirements table

Scope of inspection	Type of inspection	Frequency of inspection
Residue pipelines	Visual integrity and leak assessment	Daily whilst operating; Monthly if not operating
Embankment freeboard	Visual, to confirm required freeboard capacity is available	

Emissions

General

5. The licence holder must record and investigate the exceedance of any descriptive or numerical limit and target specified in any condition of this licence.

Emissions to surface water

6. The licence holder must ensure that tailings are deposited in accordance with the requirements specified in Table 3.

Table 3: Tailings disposal requirements table

Emission point reference	Source, including abatement
W1 – Discharge pipe(s) to dredge pond	ROM stacker overflow and process tailings

7. The licence holder must target point source emissions to surface water to the levels specified in Table 4.

Table 4: Tailings disposal – emission targets table

Emission point reference	Parameter	Target
W1	Total dissolved solids	Less than 600 mg/L
	Total acidity	Less than 50 mg/L
	Total alkalinity	Greater than 30 mg/L

Monitoring (general)

8. The licence holder must ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - all surface water sampling is conducted in accordance with AS/NZS 5667.4; and
 - 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.
9. The licence holder must ensure that:
- monthly monitoring is undertaken at least 15 days apart;
 - quarterly monitoring is undertaken at least 45 days apart;
 - 6-monthly monitoring is undertaken at least 4 months apart; and
 - annual monitoring is undertaken at least 9 months apart.
10. The licence holder must 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.

Emissions monitoring

11. The licence holder must undertake monitoring of discharges to surface water at the locations and for the parameters listed in Table 5, in the corresponding units and at the frequency specified in that table.

Table 5: Discharges to surface water monitoring table

Monitoring point reference	Parameter	Units	Frequency ¹
W1 – Discharge pipe outlet to dredge pond	Volumetric flow rate ²	m ³ /d	Monthly when discharging ³
	pH ²	-	
	Electrical conductivity @ 25°C	mg/L	
	Total dissolved solids ²		
	Total acidity		
	Total alkalinity		

Note 1: Sampling must occur on the first day of discharge, then monthly thereafter.

Note 2: In-field, non-NATA accredited analysis permitted.

Note 3: Availability ≥90% of the measurement intervals on a monthly basis.

Records and reporting

12. 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) monitoring undertaken in accordance with condition 11 of this licence; and
 - (c) complaints received under condition 14 of this licence.
- 13.** The books specified under condition 12 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.
- 14.** 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.
- 15.** 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, by no later than 1 March in each year, an Annual Audit Compliance Report in the approved form.

Annual environmental report

- 16.** The licence holder must submit to the CEO, no later than 31 October in each year, an annual environmental report which includes, but is not limited to:
- (a) details of the calculation of fees payable in respect of this licence;
 - (b) a summary of the amount of ore processed, product produced and tailings returned to the dredge pond;
 - (c) a copy of the annual groundwater monitoring summary required by Licence to Take Water GWL60367;
 - (d) results of monitoring required by condition 11 for the preceding annual period;
 - (e) a summary of any complaints received and management actions taken for each complaint; and
 - (f) a summary of any environmental incidents and any action(s) taken.
- 17.** The licence holder must ensure the report required by condition 16 includes an appraisal and trend analysis of the results against any baseline data and previous monitoring results.

Non-annual reporting

- 18.** The licence holder must submit to the CEO the information specified in Table 6 according to the specifications in that table.

Table 6: Non-annual reporting requirements table

Condition or table	Parameter	Reporting period	Reporting date	Form ¹
Table 4	Target exceedances	Quarterly	28 calendar days	ET1

Note 1: Forms are in Schedule 2.

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
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).
ACN	Australian Company Number
annual period	means a 12 month period commencing from 1 October the previous year until 30 September in that year
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 <i>Water Quality – Sampling – Guidance on sampling of lakes, natural and man-made</i>
averaging period	means the time over which a target or limit is measured or a monitoring result is obtained
books	has the same meaning given to that term under the EP Act
CEO	means Chief Executive Officer of the Department. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 JOONDALUP DC WA 6919 info@dwer.wa.gov.au
condition	means a condition to which this licence is subject under s.62 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act
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	means the <i>Environmental Protection Act 1986</i> (WA)
EP Regulations	means the <i>Environmental Protection Regulations 1987</i> (WA)
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
licence	refers to this document, which evidences the grant of a licence by the CEO under s.57 of the EP Act, subject to the Conditions
licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence
NATA	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	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the map in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act
quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30

	June, 1 July to 30 September and 1 October to 31 December in the same year
6-monthly	means the two inclusive periods from 1 January to 30 June and 1 July to 31 December in the same year
spot sample	means a discrete sample representative of the time and place at which the sample is taken

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

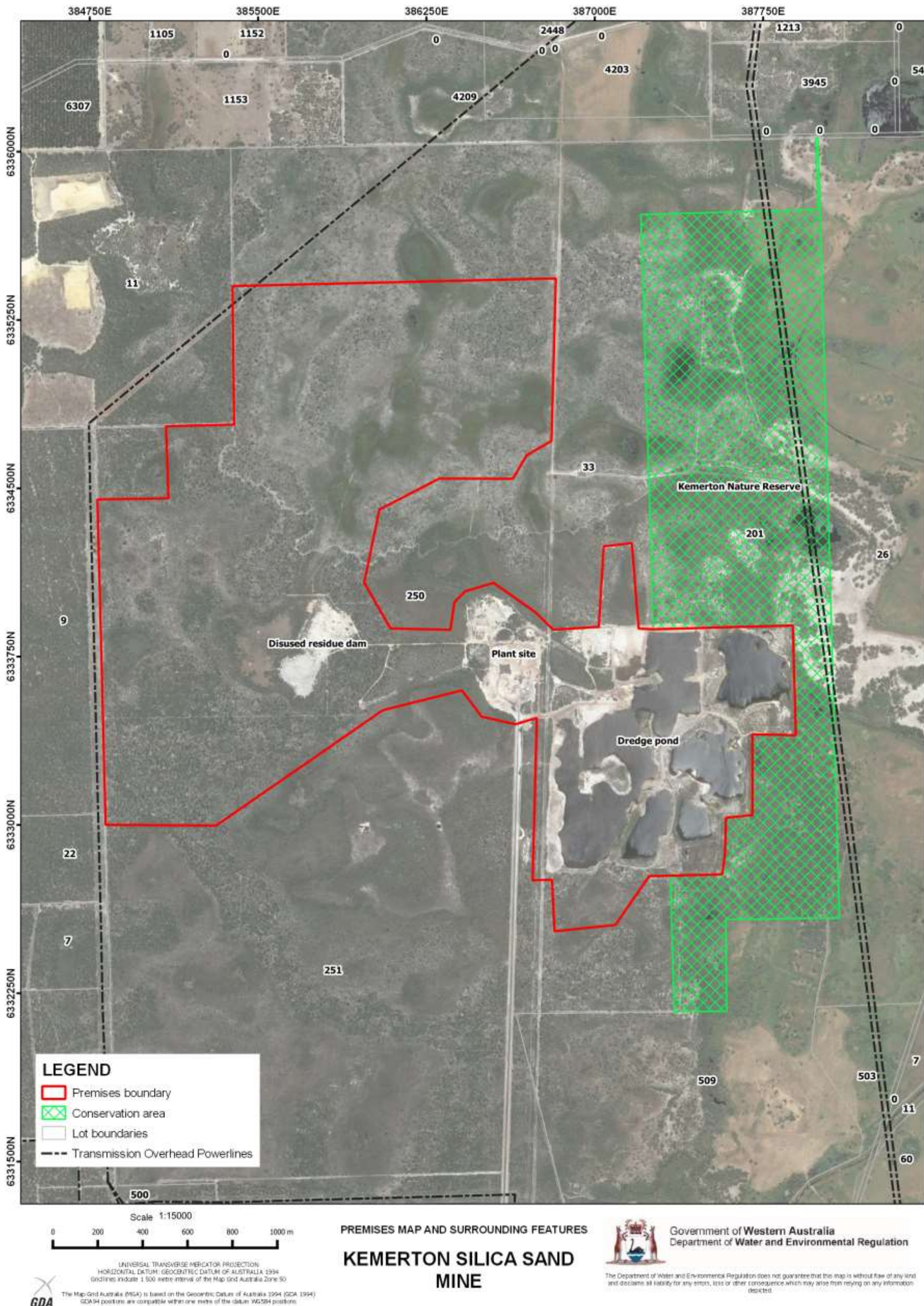


Figure 1: Map of the boundary of the prescribed premises

Schedule 2: Forms

Licence: L6593/1995/8
Form: ET1
Name: Target exceedances

Licence holder: Kemerton Silica Sand Pty Ltd
Period:

Form ET1: Target exceedances

Please provide an analysis of the target exceedances for the quarter, including but not limited to:

- (a) the emission point;
- (b) the root cause analysis for the exceedances;
- (c) any common or contributory factors; and
- (d) a description of remedial measures taken or planned to be taken, including those taken to prevent recurrence of the exceedances.

Signed on behalf of Kemerton Silica Sand Pty Ltd:.....

Date: