

Licence

Licence number L8858/2014/2

Licence holderFortescue LtdACN128 959 179

Registered business address Fortescue Ltd

PO Box 6915

EAST PERTH WA 6892

DWER file number DER2014/001172-2 (FA269898)

Duration 30/03/2024 to 29/03/2044

Date of issue 28/03/2024

Premises details Solomon Power Station

Mount Sheila, WA 6751

Legal description -

Part of mining tenement M47/1431

As defined by the map and the coordinates in

Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 52: Electric power generation: premises (other than premises within category 53 or an emergency or standby power generating plant) on which electrical power is generated using a fuel.	134.4 MWe (using natural gas) 94.2 MWe (using diesel fuel)

This amended licence is granted to the Licence holder, subject to the attached conditions, on 28 March 2024, by:

Neville Welsh
SENIOR INDUSTRY REGULATION OFFICER
REGULATORY SERVICES

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

Licence history

The following table provides an overview of the history of the licence. Works approvals, amendments, renewals, etc and includes a summary of any changes to the licence over time.

Instrument	Issue date	Summary of changes
W5104/2011/1	23/02/2012	Works approval issued to FMG Pilbara Pty Ltd
W5104/2011/1	07/09/2012	Works approval amendment to the design of the power station by replacing the original six 8.4 MW Wartsilla reciprocating engines with four 13 MW TITAN 130-20501 AXIAL gas turbines.
W5104/2011/1	01/11/2012	Works approval transferred to TEC Pipe Pty Ltd (TEC).
W5104/2011/1	19/12/2013	Works approval amendment.
W5104/2011/1	26/06/2014	Works approval amendment – extended commissioning period.
L8858/2014/1	26/03/2015	New licence issued to TEC Pipe Pty Ltd following the construction of the power station.
L8858/2014/1	08/10/2015	Licence Amendment to include all power sources that are natural gas and diesel.
L8858/2014/1	29/04/2016	DWER initiated amendment to extend the duration of the licence.
L8858/2014/1	14/11/2017	Licence transferred from TEC Pipe Pty Ltd to FMG Solomon Pty Ltd
L8858/2014/1	13/05/2019	Amendment Notice 1 to amend the premises production/design capacity for natural gas from 122 MWe to 134.4 MWe and amend reporting dates
L8858/2014/1	25/11/2020	Licence holder-initiated amendment – premises boundary change
L8858/2014/2	28/03/2024	Licence renewal with 20 year licence 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

Emissions

1. The Licence holder shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of this Licence.

Point source emissions to air

2. The Licence holder shall ensure that where waste is emitted to air from the emission points in Table 1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 1: Emission points to air

Emission point reference and location on Map of emission points	Emission Point	Emission point height (m)	Source, including any abatement
A1	Exhaust Stack on Titan Turbine MPU21_TP1	7.7 m	Solar Titan Unit 21
A2	Exhaust Stack on Titan Turbine MPU22_TP1	7.7m	Solar Titan Unit 22
A3	Exhaust Stack on Titan Turbine MPU23_TP1	7.7m	Solar Titan Unit 23
A4	Exhaust Stack on Titan Turbine MPU24_TP1	7.7m	Solar Titan Unit 24
A5	Exhaust Stack on GE LM6000 Turbine GTG1_TP1	18.5m	GE LM6000 Unit 1
A6	Exhaust Stack on GE LM6000 Turbine GTG2_TP1	18.5m	GE LM6000 Unit 2

3. The Licence holder shall nor cause or allow point source emissions to air greater than the limits specified in Table.2.

Table 2: Point source emission limits to air

Emission point Reference	Parameter	Limit (including units) ^{1,2}	Averaging period
A1-A6	Oxides of nitrogen (NOx)	< 620 mg/m ³	Stack Test (minimum 30-minute average)

Note 1: All units are referenced to STP dry

Note 2: Concentration units are referenced to 15% O2.

Monitoring

- 4. The Licence holder shall ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 5. The Licence holder shall ensure that annual monitoring is undertaken at least 9 months apart.
- 6. The Licence holder shall record production or throughput data and any other process parameters relevant to any monitoring undertaken.

- 7. The Licence holder 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 and the requirements of this licence.
- 8. The Licence holder 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.

Monitoring of point source emissions to air

9. The Licence holder shall undertake the monitoring in Table 3 according to the specifications in that table.

Table 3: Monitoring of point source emissions to air

Emission point reference	Parameter	Units ^{1,}	Averaging period	Frequency ²	Method
	Carbon monoxide (CO)		Stack test		USEPA Method 10
A1-A6	Oxides of nitrogen (NOx)	mg/m³	(Minimum 30 minute	Annually	USEPA Method 7E
	Volatile organic compounds (VOCs)		average)		USEPA Method 25A

Note 1: All units are referenced to STP dry

Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

The Licence holder shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 9 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Process monitoring

11. The Licence holder shall monitor and record parameters specified in Table 4 according to the specifications in that table.

Table 4 Process monitoring

Monitoring point reference	Parameter	Units	Frequency
Solar Titan Unit 21 Solar Titan Unit 22	Run time	Hours	
Solar Titan Unit 23 Solar Titan Unit 24	Total electrical energy generated	MWe	Monthly
GE LM6000 Unit 1 GE LM6000 Unit 2	Operating capacity	%	

Information

- 12. 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 12(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.
- 13. The licence holder must:
 - (a) undertake an audit of their compliance with the conditions of their licence during the preceding annual period; and
 - (b) prepare and submit to the CEO by no later than 31 March each year, after the end of that annual period, an Annual Audit Compliance Report in the approved
- 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.

Reporting

15. The Licence holder shall submit to the CEO the environmental report on 31 March 2024, and biennially thereafter, at the end of the annual period. The report shall contain the information listed in Table 5 in the format or form specified in that table.

Table 5: Environmental reporting requirements

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
Table 3	Air emission monitoring	None specified
Table 4	Load monitoring	None specified
13	Compliance	A copy of the AACR template is accessible via the Department's website
14	Complaints summary	None specified

- 16. The Licence holder shall ensure that the Annual Environmental Report also contains:
 - (a) any relevant process, production or operational data recorded under Condition 6; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.
- 17. The Licence holder shall submit the information in Table 6 to the CEO according to the specifications in that table.

Table 6: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
-	Copies of original monitoring reports submitted to the Licence holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licence holder from third parties

18. The Licence holder shall ensure that the parameters listed in Table 7 are notified to the CEO in accordance with the notification requirements of the table.

Table 7: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
3	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
		Part B: As soon as practicable	

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

Definitions

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

Table 8: Definitions

Term	Definition	
ACN	Australian Company Number	
Act	means the Environmental Protection Act 1986.	
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates available on the Department's website).	
annual period	a 12 month period commencing from 1 January until 31 December of the year.	
averaging period	means the time over which a limit is measured or a monitoring result is obtained.	
Books	has the same meaning given to that term under the EP Act.	
CEMS	means continuous emissions monitoring system.	
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.	
MWe	means power output (electricity generated) in megawatts.	
monthly period	means a one-month period commencing from first day of a month until the first day of the immediately following month.	
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.	
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring.	
NOx	means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide.	
premises	refers to the premises to which this licence applies, as specified at the front of	

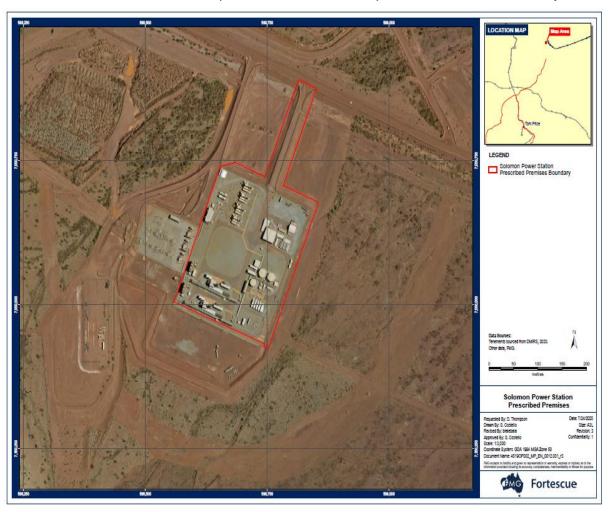
Term	Definition
	this licence and as shown on the premises map(s) Figure 1 and 2 in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
shut down	means the period when plant or equipment is brought from normal operating conditions to inactivity.
stack test	means a discrete set of samples taken over a representative period at normal operating conditions.
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions.
STP dry	means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively), dry.
USEPA	means United States (of America) Environmental Protection Agency.
USEPA Method 7E	means the USEPA Method 7E Determination of nitrogen oxides emissions from stationary sources (instrumental analyser procedure).
USEPA Method 10	means the USEPA Method 10 Determination of carbon monoxide emissions from stationary sources.
USEPA Method 25A	means USEPA Method 25A Determination of total gaseous organic concentrations using a flame ionization analyser.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The Premises is shown in the map below. The red line depicts the Premises boundary.



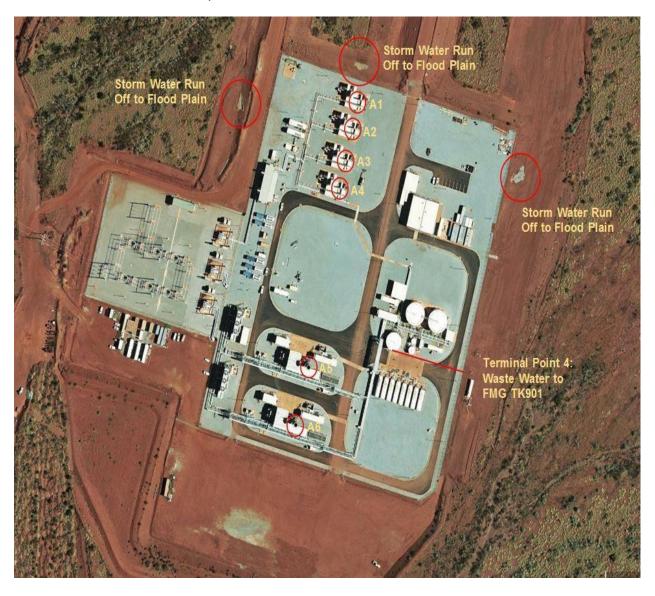
Premises Boundary Coordinates

Easting	Northing
598797.1616	7550740.812
598783.4137	7550706.667
598794.6805	7550702.06
598855.258	7550677.524
598752.9133	7550423.315
598653.8501	7550739.63
598745.889	7550721.823
598851.3391	7550875.371

Easting	Northing
598743.6826	7550426.815
598745.4112	7550431.386
598559.2243	7550504.596
598593.1875	7550588.954
598595.9226	7550595.748
598684.7722	7550746.578
598813.7976	7550890.485
598797.1616	7550740.812

Map of emission points

The locations of the emission points defined in Tables 1 are shown below.



Schedule 2: Notification form - N1

Licence: Form:	L8858/2014/2 N1		e holder: f breach:	FMG Solomon Pty Ltd	
Notification of	of detection of the	breach of a lir	nit		
used in inforr	mation supplied u	nder Part A ar . Where appro	nd B require	ust provide. Units of measurement ments shall be appropriate to the mparison should be made of actual	
Licence Numb	er	L8858/2014/2			
Name of licen	ce holder	FMG Solomon Pty Ltd			
Location of Pro	emises	Mining Tenement M47/1431, Mount Sheila WA 6751			
Time and date of the detection					
Notification	requirements for	the breach of a	limit		
Emission poin	t reference/ source				
Parameter(s)					
Limit					
Measured valu	ne				
Date and time	of monitoring				
Measures take taken, to stop	en, or intended to be the emission				
Part B					
Any more accurate information on the matter notification under Part A.		the matters for			
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 b	pehalf of FMG Solomo	on Pty Ltd			
Date					