



Works approval number	W6746/2022/1	
Works approval holder	Woodside Energy Global Pty Ltd	
ACN	006 918 832	
Registered business address	Mia Yellagonga 11 Mount Street Perth WA 6000	
DWER file number	DER2022/000569	
Duration	22/06/2023 to	21/06/2026
Date of issue	22/06/2023	
Premises details	Macedon Gas Plant Lot 500 on Deposited Plan 69197 TALANDJI WA 6710 As defined by the coordinates in Schedule 2	

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 10: Oil or gas production	1,730,000 tonnes per year
Category 34: Oil or gas refining	

This works approval is granted to the works approval holder, subject to the attached conditions, on 22 June 2023, by:

**MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES**

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

Interpretation

In this works approval:

- (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 works approval:
 - (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 works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct the infrastructure and equipment;
 - (b) in accordance with the corresponding design and construction requirements; and
 - (c) at the corresponding infrastructure location; as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure and equipment	Design and construction requirements	Infrastructure location
1.	Taurus 70/C51 gas turbine driven compressor package and associated infrastructure, pipelines, instrumentation and cabling.	<ol style="list-style-type: none">a) Dry Low NOx technology, 25ppm max NOx;b) Installation of flare arrestor with gas flow sensor;c) Lube oil systems are contained within bunds; andd) Enabled local emergency shut-down.	As shown in Figure 1 and Figure 2 of Schedule 1

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1 and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a suitably qualified engineer, that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Environmental commissioning phase

Environmental commissioning requirements and emission limits

4. The works approval holder may only commence environmental commissioning once the Environmental Compliance Report required by condition 2 has been submitted by the works approval holder.
5. The works approval holder must notify the CEO:
 - (a) at least 7 days prior to, the commencement date of environmental commissioning; and
 - (b) within 7 days after, the completion date of environmental commissioning.
6. The works approval holder must ensure that environmental commissioning activities are undertaken in accordance with the “Macedon LPO Project Environmental Commissioning Plan, ES1281, Woodside Energy/Enscope, Rev A”.
7. The works approval holder must, within 30 calendar days of the completion of environmental commissioning, submit to the CEO an Environmental Commissioning Report.
8. The works approval holder must ensure that the report required by condition 7 includes, but not be limited to:
 - (a) a summary of environmental commissioning activities undertaken, including timeframes and the volume of gas vented from the plant;
 - (b) the emissions monitoring results recorded in accordance with condition 9;
 - (c) a review of the plant’s performance against the design specifications; and
 - (d) where they have not been met, measures proposed to meet the design specification, together with timeframes for implementing the proposed measures.

Monitoring during environmental commissioning

9. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 2.

Table 2: Emissions and discharge monitoring during environmental commissioning

Discharge point/monitoring point	Parameter	Frequency	Averaging Period	Unit ^{1, 2}	Method
Compressor Turbine Exhaust Stack	NO _x	Once during environmental commissioning, when the compressor package has reached steady-state operation.	60-minute average	mg/m ³	USEPA Method 7E
	CO				USEPA Method 10
	VOC				USEPA Method 25A

Note 1: All units are referenced to STP dry

Note 2: Concentration units are referenced to O₂ 15%

10. The works approval holder must 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 unless indicated otherwise in the relevant table.
11. The works approval holder must record the results of all monitoring activity required by condition 9.

Time limited operations phase

Commencement and duration

12. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Commissioning Report for that item of infrastructure as required by condition 7 has been submitted by the works approval holder.
13. The works approval holder may conduct time limited operations for the infrastructure and equipment specified in condition 1:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder completes environmental commissioning of the infrastructure in accordance with condition 4; or
 - (b) until such time as a licence is granted in accordance with Division 3, Part V of the *Environmental Protection Act 1986*,
 whichever is sooner.

Authorised emission points to air

14. During environmental commissioning and time limited operations, the works approval holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location, as specified in Table 3.

Table 3: Authorised discharge points

Emission	Discharge point	Stack height (m)	Discharge point location
NO _x	Compressor Turbine Exhaust Stack	12.8	As shown in Schedule 1: Map of Emissions and discharge points and monitoring locations
CO			
VOC			

Compliance reporting

15. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
16. The works approval holder must ensure the report required by condition 15 includes a summary of the time limited operations, including timeframes and amount of gas processed.

Records and reporting (general)

- 17.** The works approval holder must record the following information in relation to complaints received by the works approval 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 works approval holder to investigate or respond to any complaint.
- 18.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:

 - (a) the works conducted in accordance with condition 1;
 - (b) monitoring programmes undertaken in accordance with condition 9; and
 - (c) complaints received under condition 17.
- 19.** The books specified under condition 18 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 works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 4 have the meanings defined.

Table 4: Definitions

Term	Definition
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. 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
CO	means carbon monoxide.
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.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and equipment has been constructed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
mg/m ³	means milligrams per cubic metre.
NO _x	means nitrogen oxides.
O ₂	means oxygen gas.
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in

Term	Definition
	Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
STP	means standard temperature and pressure.
suitably qualified engineer	means a person who holds a tertiary academic qualification in engineering and has a minimum 5 years of experience working in their area of expertise
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
USEPA Method 7E	refers to <i>United States Environmental Protection Agency test method 7E - Determination of nitrogen oxides emissions from stationary sources (instrumental analyzer procedure).</i>
USEPA Method 10	refers to <i>United States Environmental Protection Agency test method 10 - Determination of carbon monoxide emissions from stationary sources (instrumental analyzer procedure).</i>
USEPA Method 25A	refers to <i>United States Environmental Protection Agency test method 25A - Determination of total gaseous organic concentration using a flame ionization analyzer.</i>
VOC	means volatile organic compounds.
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 5.

Table 5: Premises boundary coordinates (GDA2020)

	Easting	Northing
1.	290586	7595661
2.	291455	7595890
3.	291669	7595592
4.	291593	7595333
5.	291418	7595158
6.	290985	7595146
7.	290912	7595370
8.	290688	7595301
9.	290586	7595661