Works Approval

Works approval number W6378/2020/1

Works approval holder Contract Power Australia Pty Ltd

ACN 081 538 258

Registered business address 338 Gnangara Road

LANDSDALE WA 6065

DWER file number DER2020/000141

Duration 11/09/2020 to 10/09/2025

Date of issue 11/09/2020

Esperance Gas-fired Power Station

Premises details 121 Harbour Road

CHADWICK WA 6450

Part of Lot 502 on Deposited Plan 413859 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed 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.	22 MWe in natural gas

This works approval is granted to the works approval holder, subject to the attached conditions, on 11 September 2020, by:

Amine Fisher

A/Manager, Process Industries

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 and install the infrastructure and equipment;
 - (b) in accordance with the corresponding design and construction or installation requirements; and
 - (c) at the corresponding infrastructure location; as set out in Table 1.

Table 1: Design and construction or installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location (as shown in Schedule 1: Maps)
1.	Gas generators	11 x 2 MWe Cummins C2000 N5CD or similar:	A1 - A11
		 each housed in an acoustic container with an exhaust silencer; 	
		each with a 100 L make up oil tank attached;	
		 each with a stack no less than 8.6 m above ground level; and 	
		sampling ports on each generator stack installed in accordance with AS4323.1	
2.	Diesel generators	3 x 1 MWe Cummins KTA50-G3 or similar;	D1 - D3
		 each housed in an acoustic container with an exhaust silencer; 	
		each with a 100 L make up oil tank attached; and	
		each with a stack no less than 3.3 M high.	
3.	Diesel tank	70 kL self-bunded tank constructed in accordance with AS 1940 and located on a concrete hardstand	Self bunded diesel tank
4.	Waste oil tank	10 kL self-bunded tank constructed in accordance with AS 1940 and located on a concrete hardstand	Self bunded 10,000 L waste oil tank
5.	Hydrocarbon storage area	Constructed with a roof covering a bunded area which is designed and constructed in accordance with AS 1940	Covered and Bunded Hydrocarbon Store
6.	Oil water separator system	Comprises an Ultraspin OS35 which discharges to a SPEL puraceptor	Ultraspin Oily Water Separator and SPEL Puraceptor

Compliance reporting

- 2. The works approval holder must within 30 calendar days of the 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.

Time limited operations phase

Commencement and duration

- 4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
- **5.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1 (as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or

until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*; whichever occurs first.

Infrastructure and equipment

6. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location (as shown in Schedule 1: Maps)
1.	Gas generators 1 to 11	No more than nine generators operating at one time excluding during start up, shut down and maintenance activities.	Gas Generators (A1 to A11)

Emissions

7. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 3, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 3: Authorised discharge points during time limited operations

Emission	Discharge point	Discharge point location (as shown in Schedule 1: Maps)
NO _x , CO, PM ₁₀ , HCHO	Gas generators 1 to 11	A1 to A11
NO _x , CO, PM ₁₀ , SO ₂	Diesel generators 1 to 3	D1 to D3
Stormwater treated via an oil water separator	Oil water separator discharge to perimeter drain	W1

8. During time limited operations, the works approval holder must ensure that the emissions from the discharge point listed in Table 4 do not exceed the corresponding limit(s) when monitored in accordance with condition 11.

Table 4: Emission and discharge limits during time limited operations

Discharge point	Parameter	Limit
Oil water separator discharge to stormwater drain	Total recoverable hydrocarbons	5 mg/L

Monitoring during time limited operations

9. The works approval holder must monitor discharges during time limited operations in accordance with Table 5.

Table 5: Emission and discharge monitoring during time limited operations

Discharge point (as shown in Schedule 1: Maps)	Parameter ¹	Frequency	Averaging Period	Unit ²	Sampling and analysis method ^{2,3,4}
A1 to A11	Volumetric flow rate	Once during time limited operation	>30 minutes	m³/s	USEPA Method 2
	NOx			g/s and mg/m ³	USEPA Method 7D or 7E
	СО				USEPA Method 10
	НСНО				USEPA Method 323

Note 1: all units are referenced to STP dry

10. The works approval holder must ensure all sampling and analysis undertaken pursuant to Condition 9 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Note 2: Concentration units for all gases are referenced to 15% O₂

Note 3: Monitoring shall be undertaken to reflect normal operating conditions

Note 4: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as a referral to AS 4323.1

11. The works approval holder must monitor discharges during time limited operations in accordance with Table 6.

Table 6: Emissions and discharge monitoring during time limited operations

Discharge point (as shown in Schedule 1: Maps)	Parameter	Frequency	Averaging Period	Unit	Sampling method
W1	Total recoverable hydrocarbons	At least twice during time limited operations, with at least a month between samples	Spot sample	mg/L	AS/NZS 5667.1 and AS/NZS 5667.10

- 12. The works approval holder must ensure all analysis undertaken pursuant to condition 11 is undertaken by a holder of NATA accreditation for the relevant parameter.
- **13.** The works approval holder must record the results of all monitoring activity required by conditions 9 and 11.

Noise verification

- 14. Within 7 days of the commencement date of time limited operations, the works approval holder must retain the services of a person qualified and experienced in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants to:
 - (a) investigate the nature and extent of noise emissions from the premises;
 - (b) assess in accordance with the methodology required in the Environmental Protection (Noise) Regulations 1997, the compliance of the noise emissions from the primary activities, against the relevant assigned levels specified in those Regulations; and
 - (c) compile and submit to the works approval holder within 90 days of the commencement date of time limited operations a report in accordance with condition 15.
- **15.** A report prepared pursuant to condition 14(c) is to include:
 - (a) a description of the methods used for monitoring and/or modelling of noise emissions from the premises;
 - (b) details and the results of the investigation undertaken pursuant to condition 14 (a):
 - (c) details and results of the assessment of the noise emissions from the premises, against the relevant assigned levels in the *Environmental Protection (Noise)*Regulations 1997 undertaken pursuant to condition 14(b); and
 - (d) an assessment of noise levels against the most recent previous noise assessment.
- 16. Where an assessment pursuant to condition 14(b) indicates that noise emissions from the premises do not comply with the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997*, the works approval holder must within 30 days of receiving an assessment report pursuant to condition 14(c) prepare a plan to ensure the undertaking of activities on the premises will no longer lead to any contravention of the *Environmental Protection (Noise) Regulations 1997*.

Time limited operations reporting

- 17. The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.
- **18.** The works approval holder must ensure the report required by condition 17 includes the following:
 - (a) a summary of the time limited operations, including timeframes and MWe of electricity produced;
 - (b) a summary of monitoring results as recorded in accordance with and condition 13;
 - (c) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable);
 - (d) a copy of the report prepared pursuant to 14(c); and
 - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

- 19. 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.
- **20.** 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) any maintenance of infrastructure that is performed in the course of complying with condition 1;
 - (c) monitoring programmes undertaken in accordance with condition 9; and
 - (d) complaints received under condition 19.
- **21.** The books specified under condition 20 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 7 have the meanings defined.

Table 7: Definitions

Term	Definition	
ACN	Australian Company Number	
AS 1940	means Australian Standard 1940:2004 The storage and handling of flammable and combustible liquids	
AS 4323.1	the Australian Standard AS4323.1 Stationary Source Emissions Method 1: Selection of sampling positions	
AS/NZS 5667.1	the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples	
AS/NZS 5667.10	the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the sampling of waste waters	
averaging period	means the time over which a recorded monitoring result is obtained	
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 Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au	
СО	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 Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.	
EP Act	Environmental Protection Act 1986 (WA).	
MWe	means power output (electricity generated) in megawatts	
NATA	National Association of Testing Authorities, Australia	

Term	Definition	
NATA accredited	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	
NO _x	oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide	
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 Schedule 1 to this works approval.	
Prescribed Premises	has the same meaning given to that term under the EP Act.	
STP dry	means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively), dry	
suitably qualified engineer	 a person who: a) holds a Bachelor of Engineering; and b) has a minimum of five years of working experience in the area of civil engineering; 	
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	United States (of America) Environmental Protection Agency	
USEPA Method 2	USEPA Method 2 Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	
USEPA Method 7D	USEPA Method 7D Determination of Nitrogen Oxide Emissions from Stationary Sources (Alkaline-Permanganate/Ion Chromatographic Method)	
USEPA Method 7E	USEPA Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)	
USEPA Method 10	USEPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)	
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 1: Maps

Premises layout

The boundary of the premises is shown in red in the map below (Figure 1). Figure 1 also shows the infrastruture layout of the premises.

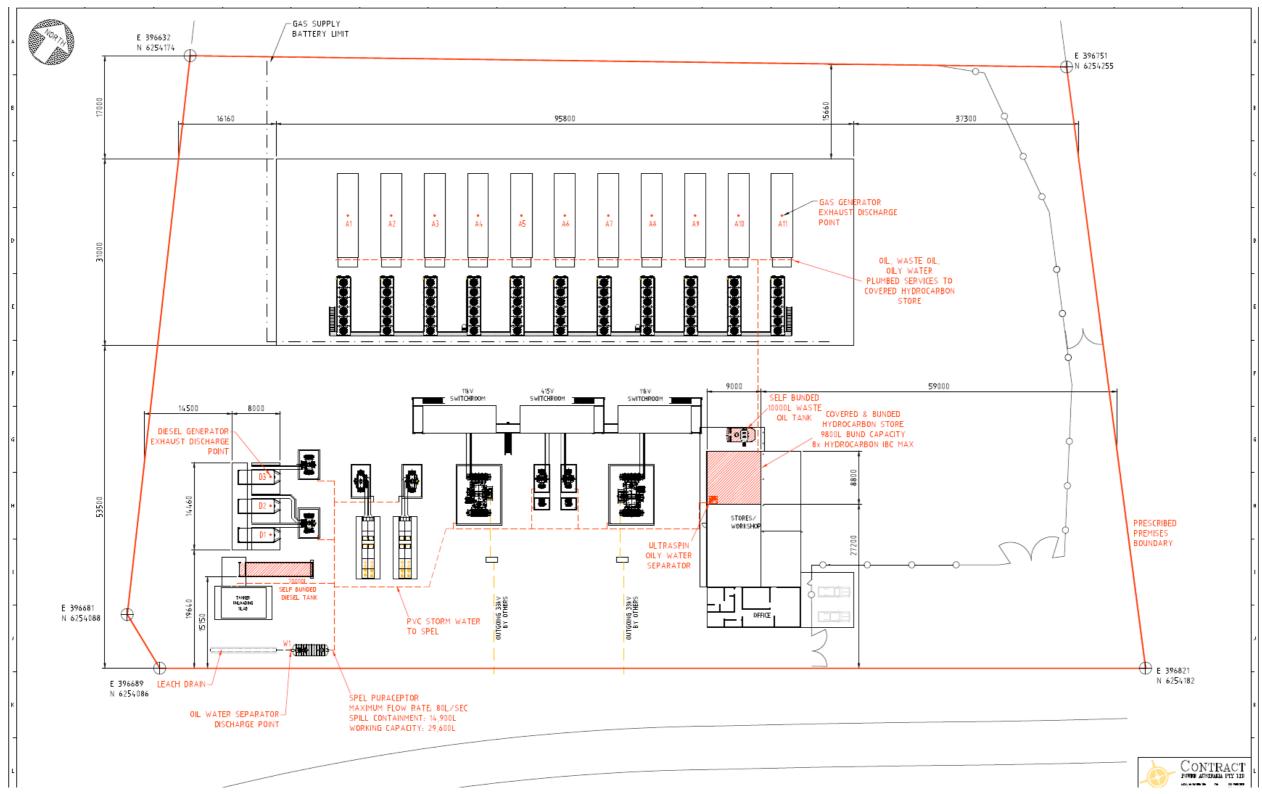


Figure 1: Map of the layout of the Prescribed Premises.