



Works Approval number W5805/2015/1
Works Approval Holder Yangibana Pty Ltd
ACN 137 945 898
Registered business address Level 3, 5 Mill Street
PERTH WA 6000
DWER file number DER2015/000034-1
Duration 23/03/2017 to 26/03/2028
Date of Issue 23/03/2017
Premises Onslow Borefield
Within Lot 556 on Plan 74894;
Lot 557 on Plan 74894; and
Lot 561 on Plan 71346 as depicted in Schedule 1.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 85B: Water desalination plant: premises at which salt is extracted from water if waste water is discharged onto land or into waters (other than marine waters)	0.74 gigalitres per Annual Period

This Works Approval is granted to the Works Approval Holder, subject to the attached conditions, on 13 March 2023, by:

Stephen Checker
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

Works Approval history

Date	Reference number	Summary of changes
23/03/2017	W5805/2015/1	Works Approval granted.
17/03/2020	W5805/2015/1	Works Approval expiry extended from 26/03/2020 to 26/03/2023.
30/11/2022	W5805/2015/1	Works Approval transferred from Water Corporation to Yangibana Pty Ltd. This transfer included a reduction of the previous Works Approval Premises Boundary.
19/03/2023	W5805/2015/1	Amendment to works approval for proposed changes to the design of the water treatment plant, premises name and premises boundary.

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct the infrastructure;
 - (b) in accordance with the corresponding design and construction requirements as set out in Table 1.
2. The Works Approval Holder must not depart from the specifications listed in Table 1 except:
 - (a) where such departure is minor in nature and does not materially change or affect the infrastructure; or
 - (b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment;
 - (c) and all other Conditions in this Works Approval are still satisfied.

Table 1: Infrastructure to be constructed	
Infrastructure	Specifications (design and construction)
1) Reverse Osmosis units	(a) Self contained reverse osmosis units to be fully self-contained with chemical resistant flooring and bunded chemical tanks for dosing system. (b) To be placed on concrete sleepers on a gravel, blue metal or equivalent hardstand.
2) Chemical Storage	(a) Process chemicals to be stored on bunded pallets for IBC storage or within a chemical storage container.

Environmental compliance reporting

3. The Works Approval Holder shall submit an Environmental Compliance Report to the CEO, following the construction of the works and prior to the first discharge into QMC.
4. The Environmental Compliance Report shall:
 - (a) certify that the works were constructed in accordance with the conditions of the Works Approval; and
 - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.

Environmental commissioning phase

Environmental commissioning requirements

5. The Works Approval Holder shall commission the Reverse Osmosis units for a period not exceeding 6 months.
6. The Works Approval Holder shall submit a commissioning report for the Reverse Osmosis units, to the CEO within 1 month of the completion of Commissioning.
7. The Works Approval Holder shall ensure the report includes;

- (a) evidence that approval under the *Radiation Safety Act 1975* has been obtained (or confirmation that approval is not required) for any commissioning discharge to QMC.
 - (b) a summary of the monitoring results recorded under condition 12;
 - (c) a list of any original monitoring reports submitted to the Licensee from third parties for the Commissioning period;
 - (d) a summary of the environmental performance of the Reverse Osmosis units as installed, against the design specification set out in the Works Approval application;
 - (e) a review of performance against the Works Approval conditions; and
 - (f) where they have not been met, measures proposed to meet the design specification and/or Works Approval conditions, together with timescales for implementing the proposed measures.
8. The Works Approval Holder shall provide the CEO with a list of departures which are certified as complying with Condition 2 at the same time as the certifications submitted in accordance with Condition 4.

Monitoring during environmental commissioning

9. The Works Approval Holder shall ensure that where waste is emitted to surface water from the emission points in Table 2 and identified on the premises map in Schedule 1, Figure 1, it is done so in accordance with the description within Table 2 and source material listed within Table 2.

Table 2: Emission points to surface water		
Emission point reference	Description	Source including abatement
QMC	Brine produced as a byproduct of the RO process discharged into QMC only during construction and commissioning of the Premises.	Brine

10. The Works Approval Holder shall ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10; and
 - (c) all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured unless indicated otherwise in relevant table.
11. The Works Approval 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.
12. The Works Approval Holder shall undertake the monitoring specified in Table 3 during the Commissioning period.

Table 3: Monitoring of emissions to surface water				
Monitoring point reference	Parameter	Units	Frequency ¹	
QMC	pH ²	N/A	Each discharge event	
	Turbidity	NTU		
	Salinity	mg/L		
	DO			
	Fluoride			
	Chlorine			
	Chloride			
	Sulphate (SO4)			
	Hydrocarbons			
	Nitrate (NO2)			
	Nitrite (NOX)			
	Ammonia (NH4)			
	Total Nitrogen (TN)			
	Filterable Reactive Phosphate (FRP)			
	Total Phosphorous (TP)			
	Calcium (Ca)			
	Magnesium (Mg)			
	Potassium (K)			
	Silica (SiO2)			
	Sodium (Na)			
	Aluminium (Al)	µg/L		
	Barium (Ba)			
	Boron (Bo)			
	Zinc (Zn)			

Note 2: Non NATA accredited analysis permitted

Commencement and duration

13. The Works Approval Holder shall ensure that the parameters listed in Table 4 are notified to the CEO and are in accordance with the notification requirements of Table 4.

Table 4: Notification requirements			
Condition or table	Parameter	Notification requirement	Format or form
3	Environmental Compliance Report	Prior to the first discharge into QMC	None specified
5	Commencement of Commissioning	7 days prior to start	None specified
	Completion of Commissioning	7 days after completion	
6	Commissioning report	1 month post commissioning	None specified

Records and reporting (general)

- 14.** 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 12; and
- 15.** The books specified under condition 14 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 5 have the meanings defined.

Table 5: Definitions	
Term	Definition
ABN	Australian Business Number
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following 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 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
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
commissioning	means the process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application
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
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
DWER	means Department of Water and Environmental Regulation
emission	has the same meaning given to that term under the EP Act
environmental compliance report	means a document to satisfy the CEO that the conditioned infrastructure and equipment has been constructed and installed in accordance with the works approval

Table 5: Definitions	
Term	Definition
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
IBC	Intermediate Bulk Container
ISO	means International Organization for Standardization
ISO accreditation	means in relation to the analysis of a sample that the laboratory is ISO accredited for the specified analysis at the time of the analysis
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
NTU	Nephelometric Turbidity Unit
Premises	refers to the premises to which this Works Approval applies, as specified at the front of this Works Approval and as shown on the premises maps (Figures 1 and 2 in Schedule 1 to this Works Approval)
prescribed premises	has the same meaning given to that term under the EP Act
QMC	Quick Mud Creek
RO	Reverse Osmosis
Schedule 1	means Schedule 1 of this Works Approval unless otherwise stated
waste	has the same meaning given to that term under the EP Act
Works Approval	means this Works Approval numbered W5805/2015/1, 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	Water Corporation

END OF CONDITIONS

Schedule 1: Maps

Figure 1. Premises map

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

