



# Works Approval

## *Environmental Protection Act 1986, Part V*

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**Works Approval Holder:** Water Corporation

**Works Approval Number:** W5647/2014/1

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**Registered office:** Water Corporation  
Level 3  
629 Leederville Street  
LEEDERVILLE WA 6007

**Premises address:** Bruce Rock Septic Tank Effluent Disposal (STED) Scheme  
38 Bruce Rock – Narembeen Road  
BRUCE ROCK WA 6418  
Lot 350 on Deposited Plan 405901 as depicted in Schedule 1.

**Issue date:** Friday, 15 August 2014

**Commencement date:** Monday, 18 August 2014

**Amendment date:** 06 November 2019

**Expiry date:** Tuesday, 31 December 2024

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
85	Sewage facility: premises – (a) On which sewage is treated (excluding septic tanks); or (b) From which treated sewage is discharged onto land or into waters	More than 20 but less than 100 cubic metres per day	90 cubic metres per day

### Conditions

This Works Approval is subject to the conditions set out in the attached pages.

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MANAGER WASTE INDUSTRIES  
REGULATORY SERVICES

Officer delegated under section 20  
of the *Environmental Protection Act 1986*

<b>Instrument log</b>		
<b>Instrument</b>	<b>Issued</b>	<b>Description</b>
W5647/2014/1	15/08/2014	New works approval.
W5647/2014/1	24/12/2015	Amendment to reduce the size of the secondary facultative pond and three maturation ponds.
W5647/2014/1	21/03/2017	Amendment to extend the expiry date, change the premises boundary, construction of an additional evaporation pond and removal of re-use as a disposal mechanism.
W5647/2014/1	20/12/2017	Amendment to extend the expiry date.
W5647/2014/1	06/11/2019	Amendment to extend the expiry date, update lot details, reduce design capacity and modify commissioning conditions.



# Works Approval Conditions

## 1 General

### 1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

**'Act'** means the *Environmental Protection Act 1986*;

**'AS/NZS 5667.10'** means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

**'annual period'** means the inclusive period from 1 July until 30 June;

**'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;

**'CEO'** means Chief Executive Officer of the Department of Water and Environmental Regulation.

**'CEO'** for the purpose of correspondence means;

Chief Executive Officer  
Department Administering the Environmental Protection Act 1986  
Locked Bag 10  
JOONDALUP DC WA 6919  
Email: [info@dwer.wa.gov.au](mailto:info@dwer.wa.gov.au)

**'MDD'** means the maximum modified dry density;

**'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;

**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

**'Schedule 1'** means Schedule 1 of this Works Approval unless otherwise stated;

**'spot sample'** means a discrete sample representative at the time and place at which the sample is taken;

**'Works Approval'** means this Works Approval numbered W5647/2014/1 and issued under the Act; and

**'Works Approval Holder'** means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval.



1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

## 1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

<b>Infrastructure</b>	<b>Specification</b>
Secondary facultative pond Maturation pond 1 Maturation pond 2 Maturation pond 3 Evaporation pond 1 Evaporation pond 2	All ponds to be constructed to the following specifications <ul style="list-style-type: none"><li>• In-situ impermeable clays (testing indicates <math>3.7 \times 10^{-10}</math> m/s) compacted to 98% Maximum Modified Dry Density.</li><li>• Constructed to 1 in 10 year ARI (24 hour) flood event</li><li>• Ponds will be gravity fed.</li><li>• Ponds to be constructed to prevent stormwater ingress.</li><li>• Ponds are constructed with the following dimensions:<ul style="list-style-type: none"><li>Secondary facultative pond: 62 x 15.8 x 1.7m with 1665m<sup>3</sup> capacity and 1600mm freeboard.</li><li>Maturation pond 1: 26 x 10.1 x 1.2m with 315m<sup>3</sup> capacity and 1700mm freeboard.</li><li>Maturation pond 2: 25.4 x 9.5 x 1.1m with 265m<sup>3</sup> capacity and 1800mm freeboard.</li><li>Maturation pond 3: 24.8 x 8.9 x 1m with 220m<sup>3</sup> capacity and 1900mm freeboard.</li><li>Evaporation Pond 1: 14,000m<sup>2</sup> x 0.7m with 9,800m<sup>3</sup> and 1500mm freeboard</li><li>Evaporation pond 2: 157 x 97 x 0.7m with 10,500m<sup>3</sup> capacity and 500mm freeboard</li></ul></li></ul>
Perimeter fencing	1.8m high chain wire fence with buried selvedge and razor wire at the top around the premise boundary.

1.2.2 The Works Approval Holder shall install and maintain permanent markers along the boundary of the Premises so it can be identified on the ground.

1.2.3 The Works Approval Holder shall submit a Commissioning Plan to the CEO eight weeks prior to the commencement of commissioning. The commissioning plan shall include but not be limited to:

- (a) the commissioning stages and expected timescales for commissioning;
- (b) expected emissions and discharges during commissioning and the environmental implications of the emissions;
- (c) how emissions and discharges will be managed during commissioning;
- (d) the monitoring that will be undertaken during the commissioning period;
- (e) how accidents or malfunctions will be managed;
- (f) start up and shut down procedures; and



- (g) reporting proposals including accidents, malfunctions and reporting against the commissioning plan.

1.2.4 The Works Approval Holder shall commission the Bruce Rock STED Scheme for a period not exceeding 3 months from when outflow from the final maturation pond first occurs.

## 2 Monitoring

2.1.1 The Works Approval Holder shall ensure that:

- (a) all treated wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- (b) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured [unless indicated otherwise in relevant table].

2.1.2 The Works Approval Holder shall undertake the monitoring specified in Table 2.1.1 during the commissioning period.

<b>Table 2.1.1: Monitoring of flow rates and effluent quality</b>				
<b>Monitoring point reference</b>	<b>Parameter</b>	<b>Units</b>	<b>Averaging period</b>	<b>Frequency<sup>1</sup></b>
Secondary facultative pond inflow	Influent flow rate	kL/day	N/A	Continuous
Final maturation pond outflow	pH <sup>1</sup>	pH units	Spot sample when outflow is occurring	Weekly
	<i>E. coli</i>	cfu/100ml		
	Total Nitrogen	mg/L		
	Total Phosphorous	mg/L		
	5 day Biochemical Oxygen Demand	mg/L		
	Effluent flow rate	kL/day	N/A	Continuous

Note 1: In-field non-NATA accredited analysis permitted.

## 3 Information

### 3.1 Reporting

3.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.

3.1.2 The compliance document shall:

- (a) certify that the works were constructed in accordance with the conditions of the works approval;
- (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.

3.1.3 The Works Approval Holder shall submit a commissioning report for the Bruce Rock STED Scheme to DWER within three months of the completion of commissioning.

3.1.4 The Works Approval Holder shall ensure the commissioning report includes;



- (a) a summary of the monitoring results recorded under condition 2.1.2;
- (b) a list of any original monitoring reports used to derive 3.1.4 (a)
- (c) a summary of the environmental performance of the Bruce Rock STED scheme as installed, against the design specification set out in the works approval application;
- (d) a review of performance against the design specification and works approval conditions; and
- (e) where they have not been met, measures proposed to meet the design specification and works approval conditions, together with timescales for implementing the proposed measures.

### 3.2 Notification

3.2.1 The Works Approval Holder shall ensure that the parameters listed in Table 3.2.1 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

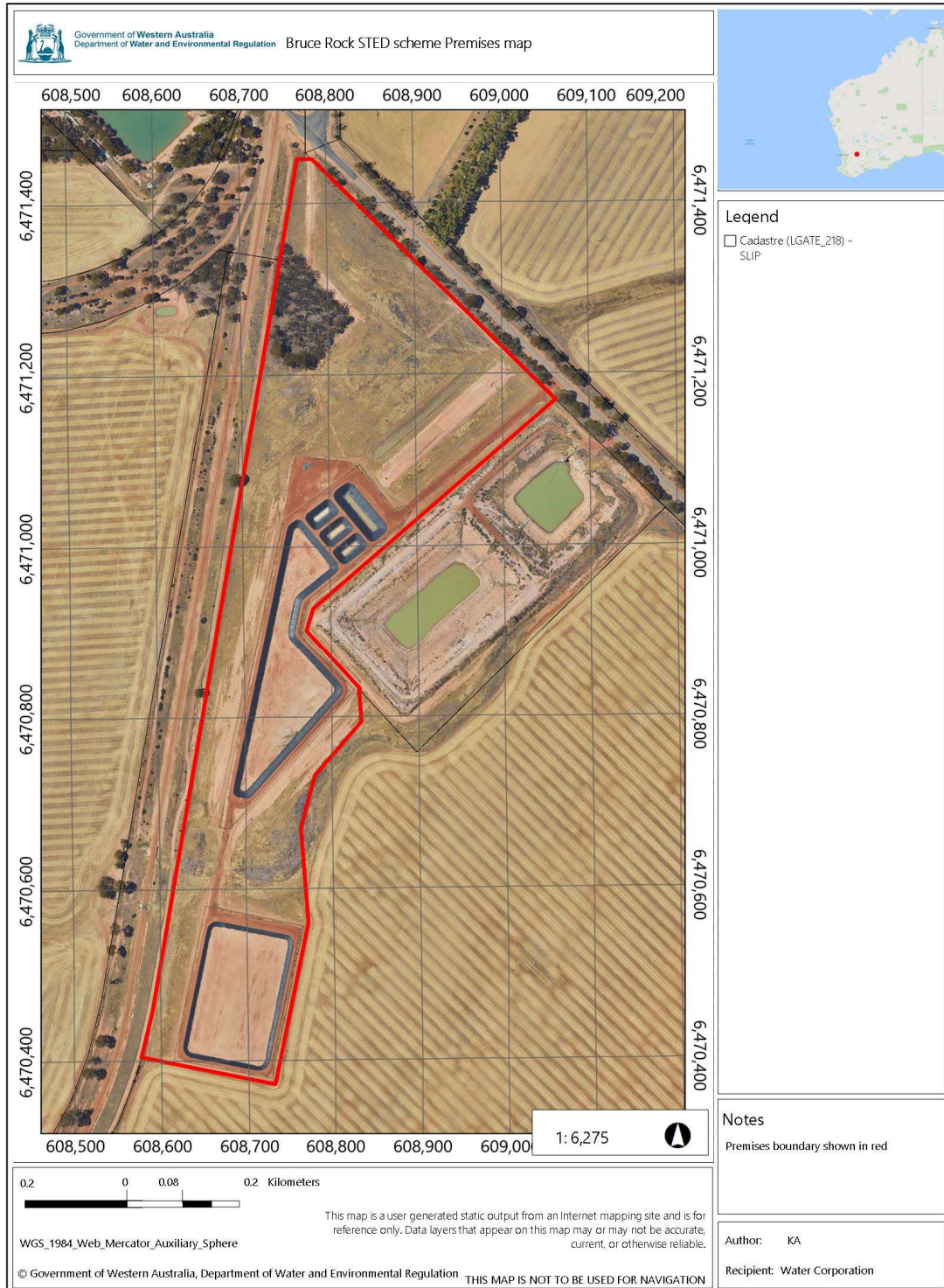
<b>Table 3.2.1: Notification requirements</b>			
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Notification requirement (in writing)</b>	<b>Format or form</b>
	Commencement of commissioning	7 days prior to start	None specified
	Completion of commissioning	7 days after completion	



## Schedule 1: Maps

### Premises map

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





### Site plan

The Premises site plan is shown in the figure below.

