



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

**Licence Holder** Water Corporation

**ABN** 28 003 434 917

**File Number:** DER2014/000764-1

**Premises**

Bruce Rock Septic Tank Effluent Disposal Scheme  
38 Bruce Rock – Narembreen Road  
Bruce Rock WA 6418

Legal description –  
Lot 350 on Deposited Plan 405901  
Certificate of Title Volume 2970 Folio 586

**Date of Report** 6 November 2019

# 1. Definitions and interpretation

## Definitions

In this Amendment Report, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
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 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Delegated Officer	an officer under section 20 of the EP Act
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.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
m <sup>2</sup>	square metres
m <sup>3</sup>	cubic metres
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Revised Works Approval	the amended Works Approval issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.

Term	Definition
STED	Septic tank effluent disposal
Works Approval Holder	Water Corporation

## 2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guideline: Decision Making (June 2019)*
- *Guidance Statement: Risk Assessment (February 2017)*

### 2.1. Purpose and scope of assessment

On 21 August 2019, Water Corporation (the Works Approval Holder) submitted an application to DWER for an amendment to Works Approval W5647/2014/1. The Works Approval Holder is constructing a septic tank effluent disposal (STED) scheme for the purpose of treating domestic household waste to a secondary standard. Septic tank effluent which has been partially treated will enter the premises through a gravity sewer connected to domestic septic systems. The Premises will consist of one facultative pond, three maturation ponds and two evaporation ponds with the dimensions shown in Table 2.

**Table 2: Bruce Rock STED scheme treatment pond dimensions**

Dimensions (rounded values)	Facultative pond	Maturation pond 1	Maturation pond 2	Maturation pond 3	Evaporation pond 1	Evaporation pond 2
Length (m)	62	26	25.4	24.8	N/A <sup>1</sup>	157
Width (m)	15.8	10.1	9.5	8.9	N/A <sup>1</sup>	97
Depth (m)	1.7	1.2	1.1	1	0.7	0.7
Capacity (m <sup>3</sup> )	1665	315	265	220	9800	10,500
Freeboard (mm)	1600	1700	1800	1900	1500	500

<sup>1</sup>Evaporation pond 1 has a non-standard arrangement and the provision of single length and width dimensions is not applicable. The pond has a surface area of 14,000 m<sup>2</sup>.

Due to the Works Approval Holder experiencing delays constructing conveyance infrastructure associated with the STED scheme, a requirement to extend the duration of the works approval has been requested through this amendment application. Additionally, the use of the scheme by surrounding residents has been lower than expected. These factors will extend the commissioning period required for the Premises, as inflow volumes are low and the maturation ponds are unlikely to be filled for approximately 5 years. Currently the Works Approval contains commissioning conditions dependant on the maturation ponds being sampled.

The Works Approval Holder has requested the following amendments:

- Change of design capacity from 100 m<sup>3</sup>/day to 90 m<sup>3</sup>/day
- Change of premises category from 54 to 85. Both of these categories are classified as sewage facilities under Schedule 1 of the EP Regulations.
- Extension of the Works Approval duration to December 2024
- Removal of maturation pond monitoring during commissioning and replacement with inflow volume monitoring.

Table 3 below outlines the proposed changes to the Works Approval category and design capacity.

**Table 3: Proposed design capacity and category changes**

Current Category	Current design capacity	Proposed category	Proposed design capacity	Description of proposed amendment
54	100 m <sup>3</sup> /day	85	90 m <sup>3</sup> /day	Calculations for the design capacity were incorrect and construction of the facility has shown that the capacity is only 90m <sup>3</sup> /day.

While undertaking the Works Approval Holder's proposed amendments, the Delegated Officer will also update the legal land description of the Premises. The Works Approval Holder was in the process of purchasing and excising the land parcel when the initial Works Approval was granted. Subsequently cadastral boundaries and lot numbers have changed as a result of this purchase. The Premises is now contained within Lot 350 on Deposited Plan 405901, with the Premises boundary conforming to the cadastral boundary.

### 3. Amendment history

Table 4 provides the amendment history for W5647/2014/1.

**Table 4: Previous Works Approval amendments**

Instrument	Issued	Amendment
W5647/2014/1	15/08/2014	Work Approval issued.
W5647/2014/1	24/12/2015	Amendment to reduce the size of the secondary facultative pond and three maturation ponds.
W5647/2014/1 Amendment Notice 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 Amendment Notice 2	20/12/2017	Amendment to extend the expiry date.

#### 3.1. Consolidation of Works Approval

As part of this amendment package DWER has consolidated the Works Approval by incorporating changes made under Amendment Notice 1 and 2.

The obligations of the Works Approval Holder have not changed in consolidating the Works Approval. DWER has not undertaken any additional risk assessment of the Premises related

to previous Amendment Notices.

In consolidating the Works Approval, the CEO has:

- updated references to the department from DER to DWER; and
- corrected clerical mistakes and unintentional errors.

Previously issued Amendment Notices will remain on the DWER website for future reference and will act a record of DWER's decision making.

## 4. Decision

The Delegated Officer considers that the extension to the Works Approval duration, reduced design capacity and resultant change to the prescribed premises category will not alter the environmental risk profile of the Premises for the following reasons:

- The throughput of the facility has decreased marginally and this would not increase the environmental risk of the Premises due to the reduced volume of sewage being received.
- Category 54 and Category 85 are for the same prescribed activity, being the treatment of sewage or discharge of treated sewage. The categories differ due to their specified production or design capacity, with Category 85 applying to low volume (less than 100m<sup>3</sup>/day) facilities and Category 54 applying to high volume (more than 100m<sup>3</sup>/day) facilities. This distinction has been made as low volume sewage treatment usually has a lesser risk of environmental harm.
- The treatment ponds and evaporation ponds specified in the Works Approval have already been constructed. Extending the duration of the Works Approval will allow for an adequate validation of the treatment process to occur, given the conveyance delays and low uptake the scheme is currently experiencing.

The Delegated Officer does not consider the replacement of effluent monitoring during the commissioning period with influent flow rate monitoring as acceptable for the following reasons:

- The Delegated Officer does not agree that the maturation ponds are unable to be sampled during commissioning. The Works Approval allows for an extended commissioning period that does not cease until 3 months after the last maturation pond fills. This permits a commissioning duration of at least 3 months beyond the point the maturation ponds have reached a suitable level for representative sampling.
- Measurement of inflow volume is not a suitable alternative to sampling of treated effluent during commissioning. Inflow volumes do not provide verification of treatment performance, which is the Department's intent when requiring monitoring and reporting during commissioning.

The Delegated Officer will amend the legal description of the Premises as the Works Approval Holder has demonstrated that it is the Occupier of the area encompassed by the Prescribed Premises boundary through an updated Certificate of Title.

**Based on the above, the Delegated Officer has determined that the requested works approval amendment will be granted in part.**

**The Delegated Officer notes that such a long duration is unusual for a works approval and the Works Approval Holder should consider the impact of low uptake on the commissioning process for any future STED scheme applications and plan accordingly.**

## 4.1. Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

**Table 5: Works approval amendments**

Condition No.	Proposed amendments
Premises address	<ul style="list-style-type: none"> <li>Change of the Premises legal description from 'Part Lots 301 on Plan 33142 and Lot 341 on Plan 163664' to 'Lot 350 on Deposited Plan 405901'.</li> <li>Addition of a street number to the Premises address.</li> <li>Reference to coordinates removed.</li> </ul>
Expiry date	Changed from 'Tuesday 31 December 2019' to 'Tuesday 31 December 2024'
Category number	Changed from 'Category 54' to 'Category 85'.
Category design capacity	Changed from '100 cubic metres or more per day' to 'More than 20 but less than 100 cubic metres per day'.
Approved premises design capacity	Changed from '100 cubic metres per day' to '90 cubic metres per day'.
Instrument log	Insertion of a table to track amendments made to the Works Approval.
Definitions	<p>Changed CEO definition from the 'CEO of DER' to the 'CEO of DWER'.</p> <p>Changed the CEO correspondence address to the current physical and digital address of the Department.</p>
Various	Changed all references of 'DER' to 'DWER'.
1.2.4	Wording changed to more clearly reflect the intent of the condition and remove ambiguity.
Table 2.1.1	<ul style="list-style-type: none"> <li>Insertion of influent flow rate monitoring during commissioning to confirm the Premises falls within a category listed in Schedule 1 Part 2 of the EP Regulations.</li> <li>Monitoring point reference changed to more clearly reflect the intended sample point and remove ambiguity.</li> <li>Averaging period changed to reflect that sampling does not need to occur until the maturation ponds have filled and outflow to the evaporation ponds is occurring.</li> </ul>
Schedule 1	Premises map updated to reflect the current Premises boundary and land cadastre.

## 5. Consultation

**Table 6: Summary of consultation**

Method	Comments received	DWER response
Applicant referred draft documents (14 October 2019)	The Applicant submitted no formal comments and requested the Works Approval to be issued as amended.	N/A

**MANAGER WASTE INDUSTRIES  
REGULATORY SERVICES**

*An officer delegated by the CEO under section 20 of the EP Act*

## Appendix 1: Key documents

	Document title	Availability
1	Works Approval W5647/2014/1 – Bruce Rock STED Scheme	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
3	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
4	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
5	DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	