

TREATMENT PLANT APPROVAL 16/2021

Plumbing and Drainage Act 2018

Approval

1. The **Econocycle ENC 10-1** ("the system") described in the Specifications and Drawings in the attached Schedule and manufactured by **Eco Septic Pty Ltd** (ABN 086 310 474) ("the manufacturer") has been assessed in accordance with the Queensland Plumbing and Wastewater Code (QPW Code) dated 26 October 2017.
2. Approval is granted for the secondary quality wastewater treatment system, subject to compliance by the manufacturer with the requirements of the *Plumbing and Drainage Regulation 2018*, and the conditions of approval detailed below.
3. This approval, the conditions of approval and the Schedule comprise the entire Treatment Plant Approval document.
4. Any modification by the manufacturer to the design, drawings or specifications scheduled to this approval must be approved by the Chief Executive.

Conditions of approval

5. The manufacture, installation, operation, service and maintenance of the systems must be in conformity with the conditions of this Treatment Plant Approval.
6. The secondary quality wastewater treatment system, which is an example of the approved systems, may only be used on premises that generate per day:
 - (a) a maximum hydraulic loading of 2,000 litres; and
 - (b) a maximum organic loading of 700g BOD⁵
7. The system must continue to meet the requirements of secondary quality wastewater treatment system, producing the following effluent quality:
 - (a) 90% of the samples taken must have a BOD⁵ less than or equal to 20 g/m³ with no sample greater than 30g/m³.
 - (b) 90% of the samples taken must have total suspended solids less than or equal to 30g/m³ with no sample greater than 45g/m³.
 - (c) 90% of the samples taken must have a thermotolerant coliform count not exceeding 200 organisms per 100 mL with no sample exceeding 1000 organisms per 100 mL.
 - (d) Total chlorine concentration must be between 0.5g/m³ and 2.0 g/m³ in four out of five samples taken.
8. Each system must be serviced in accordance with the details supplied in the owner's operation and maintenance manual.
9. This approval does not extend, apply to, or include the land application system used in conjunction with an approved system installed on premises.

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Delegated Authority
Department of Energy & Public Works



10. Each system must be supplied with —

- (a) a copy of this Treatment Plant Approval document;
- (b) details of the system;
- (c) instructions for authorised persons for its installation;
- (d) a copy of the owner's manual to be given to the owner at the time of installation; and
- (e) detailed instructions for authorised service personal for its operation and maintenance.

11. At each anniversary of the Treatment Plant Approval date, the supplier must submit to the Chief Executive a list of all systems installed in Queensland during the previous 12 months. Where the Chief Executive is notified of any system failures the Chief Executive may randomly select a number of installed systems for audit. The Chief Executive will notify the supplier's nominated NATA accredited laboratory which systems are to be audited for BOD⁵ and TSS. The sampling and testing of the selected systems, if required, is to be done at the supplier's expense. The following results must be reported to the Chief Executive;

- a) Address of premises;
- b) Date inspected and sampled;
- c) Sample identification number;
- d) BOD⁵ for influent and effluent; and
- e) TSS for influent and effluent.

12. The Chief Executive may, by written notice, cancel this approval if the manufacturer/supplier fails —

- a) to comply with one or more of the conditions of approval; or
- b) within 30 days, to remedy a breach, for which a written notice been given by the Chief Executive.

13. This approval may only be assigned with the prior written consent of the Chief Executive.

14. This approval expires on 01 January 2024 unless cancelled earlier in accordance with paragraph 12 above.

Stacey McInnes

A/Director

**Plumbing, Drainage and Special Projects
Building Legislation and Policy**

Date approved: 31 March 2021

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SCHEDULE

Attachment 1

Drawings and Specifications for the

Econocycle ENC 10-1

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MODEL ENC10-1 SPECIFICATION

- | | |
|-------------------------------------|--|
| 1) Number of persons | 10 |
| 2) Temperature & Humidity range | -2°C - 45°C
12% - 95% |
| 3) Tanks | Single 7000 litre min concrete tank |
| 4) Blower | 80 litres per minute - Nitto LA80 / Hi Blow 80 |
| 5) Irrigation Pump | 7.5 metre head automatic start |
| 6) Septic Section | 3050 litres. Tank with baffle at 2/3 -1/3 position |
| 7) Aeration Section | 2500 litres min of aeration divided into two sections |
| 8) Clarifier | 0.45m ² / 0.45m ² per person / 420 litres |
| 9) Chlorine contact & Pump-Out Tank | 420 litres. Tank with internal pump out section |
| 10) Media | 50m ² (2 packs x 500 x 800 x 800mm)
Aqua Cool CF1900 |
| 11) Diffusers | 2 x 800mm |
| 12) Chlorinator | 1 Chlorine Canister (space for 2 nd if required) |

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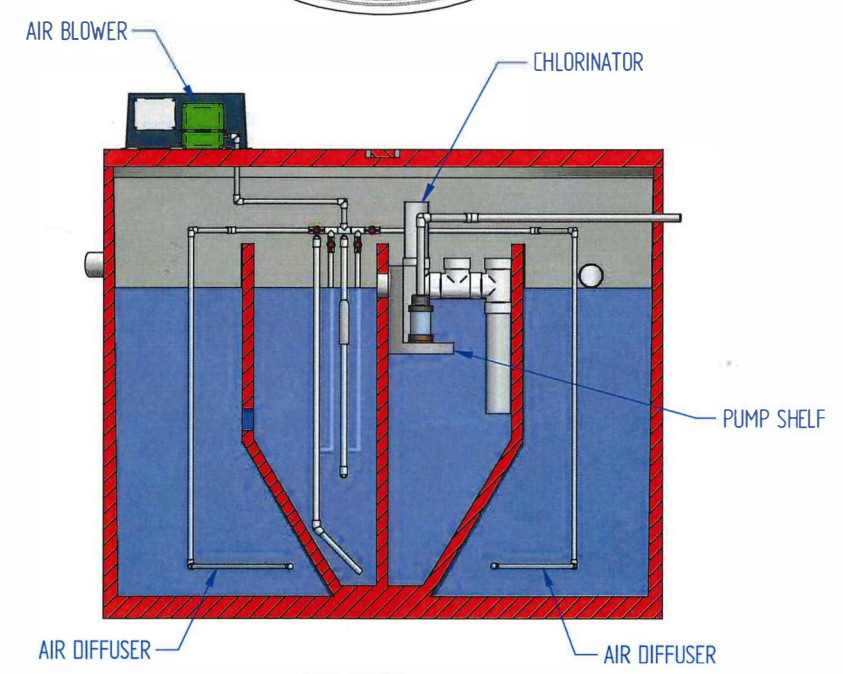
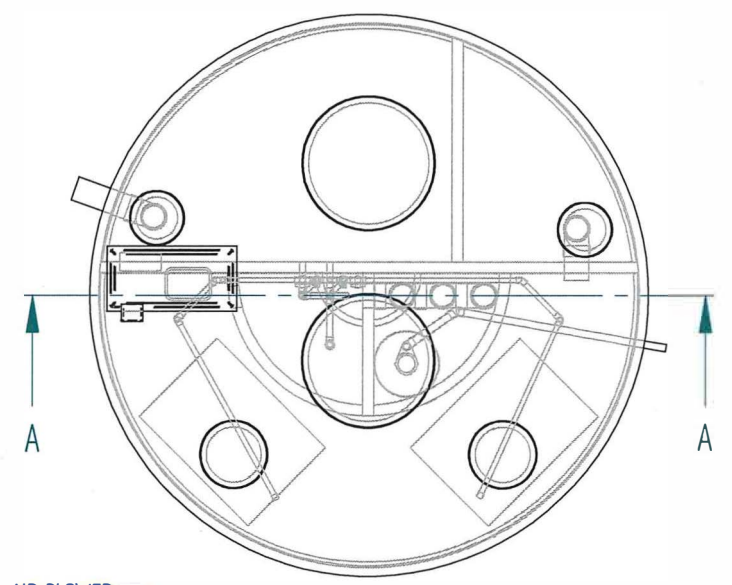
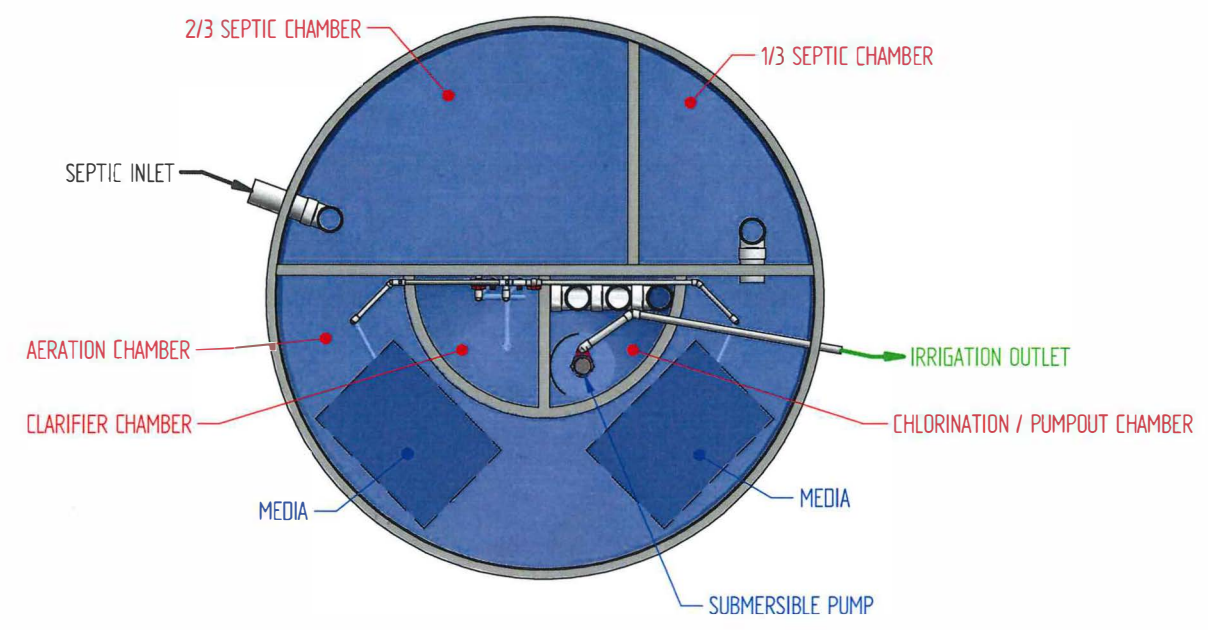
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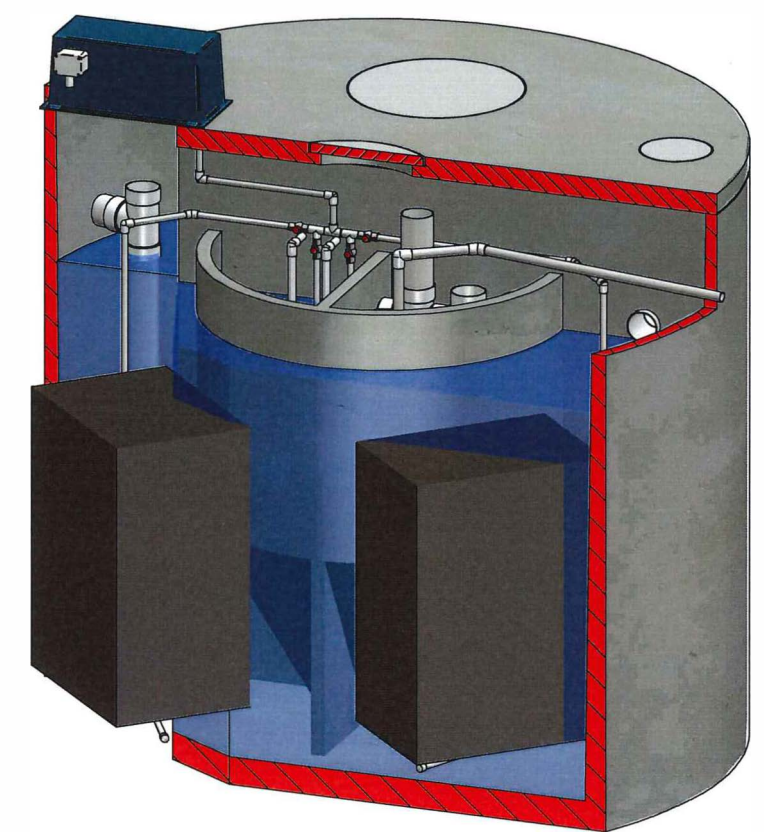
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SECTION A-A



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- NOTES:
- 1. SYSTEM CAPACITY: 10 PEOPLE
 - 2. SEPTIC TANKS MANUFACTURED AND TESTED IN ACCORDANCE WITH AS/NZS 1546.1:2008

<div>Econocycle</div> <div>AERATED WASTEWATER TREATMENT SYSTEMS</div>			PROJECT ENC10-1		
		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM	TITLE TANK ASSY CERTIFICATION DRAWING		
<div>COPYRIGHT</div> <div>THIS DRAWING AND INFORMATION CONTAINED HEREIN REMAINS THE COPYRIGHT PROPERTY OF ECONOCYCLE AND CANNOT BE COPIED OR REPRODUCED WITHOUT A WRITTEN PERMISSION</div>	SCALE DO NOT SCALE	DATE PLOTTED 24/09/2010	COAT/TREAT. —		SHEET SIZE A3
	DRAWN BY P MCKAY	DRAWING LAST MODIFIED BY P MCKAY	PART# 124_0710		REVISION 2.6 SHEET No. 1 OF 1
	MODELLED BY P MCKAY	MODEL LAST MODIFIED BY P MCKAY			