TREATMENT PLANT APPROVAL 01/2023

Plumbing and Drainage Regulation 2019, part 4.



Approval

- The Envirotech Aerobic Sand Filter CP Signature Series ("the system") described in the Specifications and Drawings in the attached Schedule and manufactured by Pinnacle Enviro Systems Pty Ltd. T/A Envirotech Treatment Systems (ABN 76 650 825 380) ("the manufacturer") has been assessed in accordance with the Queensland Plumbing and Wastewater Code (QPW Code).
- 2. Approval is granted for the system as an advanced secondary quality wastewater treatment system with nutrient reduction, subject to compliance by the manufacturer with the requirements of the *Plumbing and Drainage Regulation 2019*, part 4 and the conditions of approval detailed below.
- 3. This approval, the conditions of approval and the Schedule comprise the entire Chief Executive 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 system when tested by a certification accreditation body in accordance with AS1546.3:2017 was found to comply with the advanced secondary 10EP/1500L level with nutrient reduction effluent criteria and must continue to meet the following requirements:

TABLE 2.2 (AS1546.3:2017)

EFFLUENT COMPLIANCE CRITERIA FOR AN STS WITH NUTRIENT REDUCTION FACILITIES

Parameter	Secondary effluent with reduced nutrients		Advanced secondary effluent with reduced nutrients		
	90% of samples	Maximum	90% of samples	Maximum	
BOD ₅	≤ 20 mg/L	30 mg/L	≤ 10 mg/L	20 mg/L	
TSS	≤ 30 mg/L	45 mg/L	≤ 10 mg/L	20 mg/L	
E. coli *	≤ 10 cfu/100 mL	30 cfu/100 mL	≤ 10 cfu/100 mL	30 cfu/100 mL	
FAC†	Minimum 0.5 mg/L ‡	N/A	Minimum 0.5 mg/L ‡	N/A	
Turbidity §	N/A	N/A	N/A	10 NTU	
Total N	N/A	15 mg/L	N/A 15 mg/L		
Total P	N/A	2 mg/L	N/A	2 mg/L	

- * Where disinfection is required.
- † Where chlorine disinfection is used.
- ‡ Minimum level, not 90% of samples.
- § Where UV light is used for disinfection (see Paragraph B3.1).
- | In alignment with NZ OSET NTP 'A grade' nutrient reduction capabilities.

Treatment Plant Approval
Approved by: Lindsay Walker
Delegated Authority
Department of Energy & Public Works



7. Each system must be serviced in accordance with the accreditation certificate by Global Certification Pty Ltd on 16 March 2019, and details supplied in the owner's operation and maintenance manual.

8. Each system must be supplied with —

- Treatment Plant Approval
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- (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.
- 9. 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 Chie 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.
- 10. 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.
- 11. This approval may only be assigned with the prior written consent of the Chief Executive.
- 12. This approval expires on 15 February 2028 unless cancelled earlier in accordance with paragraph 10 above.

Lindsay Walker

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Director Plumbing, Drainage and Special Projects

Date approved: 15 February 2023

ABN 61 331 950 314



TREATMENT PLANT APPROVAL No. 01/2023Plumbing and Drainage Regulation 2019, part 4

SCHEDULE

Attachment 1

Specifications & Drawings for the

Envirotech Aerobic Sand Filter – CP Signature Series



Pinnacle Enviro Systems Pty Ltd T/A Envirotech Treatment Systems

44 Palmerin Street, Warwick, QLD 4370, Australia

Product Performance Testing

AS 1546.3:2017

Envirotech 10 A.S.F. CP Signature Series has achieved Advanced Secondary Quality Effluent at 1500 L/day (10EP level) with Nitrogen reduction of 39.27% and Phosphorus reduction of 36.43%.

Model	Disinfection	Average Results over the Test Period	Servicing Frequency	Discharge	Manufactured and assembled
Envirotech 10 A.S.F. CP	Yes	TSS 7.66mg/L BOD5 2.31mg/L Nitrogen 43.66mg/L	Yearly	Pumped via disinfection/pump chamber with chlorine dispenser	Manufactured and Assembled: 44 Palmerin Street, Warwick,
Signature Series		Phosphorus 7.59mg/L E coli 0.93 CFU/100mL			QLD 4370, Australia

Chlorine was added to the system at the commencement the test period for sterilisation.

Servicing is conducted yearly

This Certificate of Conformance to the Product Certificate Scheme for "Domestic Wastewater Treatment Units (AWTS)" remains the property of Global Certification Pty. Ltd. and is granted subject to the terms and conditions of the Contract Application, in respect of the Product certified on this page and the attached schedule to the Certification of Conformance, bearing the same number as this certificate.

Managing Director

EXPIRY DATE:

CERTIFICATE #:

18 November 2022

CERTIFICATION DATE:

DATE OF ISSUE: 18 November 2022

18 November 2027

4302-3105-01











