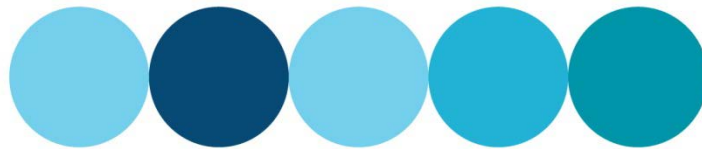


Approval certificate

Trade waste pre-treatment product



Applicant: Fox Environmental Systems Pty Ltd
Postal address: Unit 2 / 8 Dual Ave, Warana QLD 4575

Attention: David Dickson
Web: www.foxenviro.com.au
Email: info@foxenviro.com.au

Manufacturer: Fox Environmental Systems Pty Ltd
Address: Unit 2 / 8 Dual Ave, Warana QLD 4575

Product/device description

The Fox Series FX separators are enhanced gravity separators that incorporate a Bio-Tube® filtration media pack to promote coalescing of oil droplets and enhance flotation separation from the water in accordance with Stokes Laws. The design of the tube pack offers a large surface area for the interruption of flow through the unit with the spiral construction of the tube promoting an upward flow of oil particles. The units are supplied with a low voltage pump motor control station. There are several pump options available (noted below).

All units are manufactured from 304 Stainless Steel as standard and are fully seal welded. A removable lid ensures that rain or hose water cannot enter the tank in normal circumstances. The lid is vented and has provision for locking. An option is available for the units to be manufactured from grade 316 Stainless Steel when they are to be used for extremely aggressive waste or salt water applications.

The acceptance certificate applies to the pre-treatment devices of the following sizes:

Approval Number	Model	Coalescing Medium	Tube Packing Arrangement (mm)	Max Flow Rate	Actual Flow Rate	Pump Type	In / Out Diameter (mm)	Final Filter Bag
AN-015-01	FX1000SS	VT* 42 mm ID	(290x630x350) x 1	1000 L/h	720 L/h	Mono CP 11	40 / 50	1 x 100 µm
AN-015-02	FX1000SSD	VT* 42 mm ID	(290x630x350) x 1	1000 L/h	800 L/h	FXP 1000	40 / 50	1 x 100 µm
AN-015-03	FX1500SS	VT* 42 mm ID	(378x630x350) x 1	1500 L/h	720 L/h	Mono CP 11	40 / 50	1 x 100 µm
AN-015-04	FX1500SSD	VT* 42 mm ID	(378x630x350) x 1	1500 L/h	1142 L/h	FXP 1500	40 / 50	1 x 100 µm
AN-015-05	FX3000SS	VT* 42 mm ID	(290x630x350) x 2	3000 L/h	1500 L/h	Mono CP 25	40 / 50	2 x 100 µm
AN-015-06	FX3000SSD	VT* 42 mm ID	(290x630x350) x 2	3000 L/h	2580 L/h	ASM DS 32	40 / 50	2 x 100 µm
AN-015-07	FX6000SSD	VT* 42 mm ID	(290x630x350) x 3	6000 L/h	5400 L/h	ASM DS 38	80 / 100	N/A

* Vertical tube

Special conditions of approval

1. The product shall be *supplied* with manufacturer's installation instructions and recommended procedures for operation and maintenance.
2. The product shall be *installed* strictly in accordance with the manufacturer's written instructions and the *Plumbing Standards*, with particular emphasis on the following:
 - a. Oil water separators must be installed in a bunded area and connected back to the pump pit.
 - b. A Trade Waste Sampling Point (TWSP) must be installed according to the Corporation's typical drawings.
 - c. The outlet pipe must be plumbed via a tundish that is separated by an air gap and upstream to the TWSP.
3. This approval certificate is not a stand-alone document and **must be read** in conjunction with Water Corporation's *Typical Drawings for Trade Waste – Coalescing Plate Separator (HX33-12-10)* and *Trade Waste Sampling Point (TWSP) (HX33-11-30)*.
4. A maintenance contract is to be in place to ensure the ongoing reliability of the product.
5. Water Corporation must be notified within fourteen (14) days upon installation of the product
6. The use of emulsifying agents upstream of the product must not occur. Such instructions must be noted on operating documentation.
7. The product chosen must be suitably sized to avoid surge conditions.
8. Clear access for the purposes of maintenance or servicing of the pre-treatment device must be maintained at all times.
9. This approval certificate is not an endorsement of the product by Water Corporation, and no claim shall be made in advertising, promotion or other manner to the effect.
10. Water Corporation accepts no responsibility for the effective operation, performance or efficiency of the product. This approval is not an engineering approval or structural endorsement.

Approval certificate



Trade waste pre-treatment product

Special conditions of approval (continued)

11. The proponent of the approved product must formally seek a request for re-approval of the product no later than three (3) months before the assigned **Validity Period** has expired from the **Date Issued** of this approval certificate.
12. Water Corporation reserves the right to vary any requirements at any time. Any application of this condition normally occurs after consultation with the manufacturer, supplier and end business user connected to Water Corporation's sewer.
13. Water Corporation shall be notified in writing if the pre-treatment device is withdrawn from sale.
14. The proponent of the approved product accepts that the information provided in this document shall be made publically available.

General conditions of approval

Approval shall be **suspended** where any of the following conditions are not met:

1. If there is a breach of the Special Conditions.
2. The assigned **Validity Period** has expired from the **Date Issued** of this approval certificate.
3. The product shall be manufactured in accordance with Water Corporation's requirements at the time of approval.
4. The product shall be manufactured to comply according to the details noted in **Fox Environmental System Maintenance and Operation Manual Oil/Water Separator** (published 8/06/2007) in addition to any further details provided by the proponent when seeking this approval.
5. The product supplied for use in Water Corporation's area of operations shall comply with the requirements shown on this approval certificate. Sizes, classes, lengths or other product variables which are available with the product but which are not approved as listed on this approval certificate shall not be offered by the supplier for use in Water Corporation's area of operations.
6. All discharges to sewer associated with this product must not exceed Water Corporation's *Trade Waste Acceptance Criteria*.
7. Prior to any business (which is connected to Water Corporation's sewer) installing this product the business must apply to Water Corporation for a *Trade Waste Permit* for approval to discharge.
8. If this certificate has been issued to the manufacturer of this product then it is the responsibility of the manufacturer to ensure all current and future suppliers / vendors of this product are provided a copy of this approval certificate.

Approval shall be **reviewed** where any of the following conditions occur:

1. The product is manufactured with either different materials, methods of manufacture, location of manufacture, source of raw materials, component subcontractors or models to that at the time of approval.
2. The ownership of the primary manufacturer or any subcontractors is varied from that at time of approval.
3. The standards and/or specifications to which the product was required to comply with at the time of approval have been amended or revised.
4. The product has been found to sustain damage or provide unsatisfactory performance on occasions of number considered excessive by Water Corporation, when handled, stored, assembled or installed in accordance with the supplier's or manufacturer's written instructions.

Approved drawing(s):

FX1000SS (drawing number A4-SPEC-1020, drawn 01/11/2010)
FX1000SS-D (drawing number A4-SPEC-1020, drawn 01/11/2010)
FX1500SS (drawing number A4-SPEC-1021, drawn 01/11/2010)
FX1500SS-D (drawing number A4-SPEC-1021, drawn 01/11/2010)
FX3000SS (drawing number A4-SPEC-1022, drawn 01/11/2010)
FX3000SS-D (drawing number A4-SPEC-1022, drawn 01/11/2010)
FX6000SS-D (drawing number A4-SPEC-1023, drawn 01/11/2010)

Authorising person:

Stephen Jerkovic (Team Leader – Investigations)

Date issued

28 September 2017

Validity period:

Five (5) years