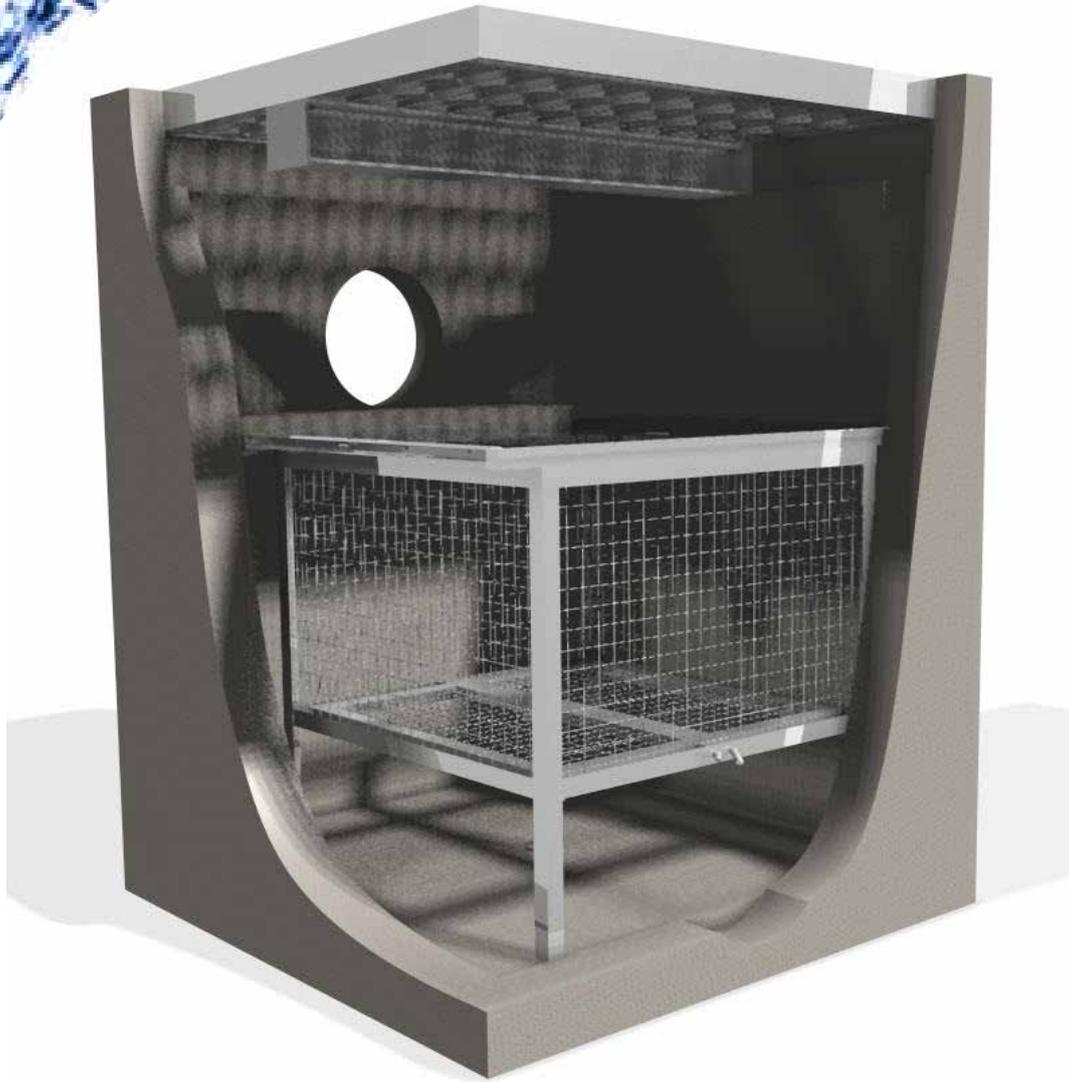


# Ecosol™ Drop Trap Maintenance Guide

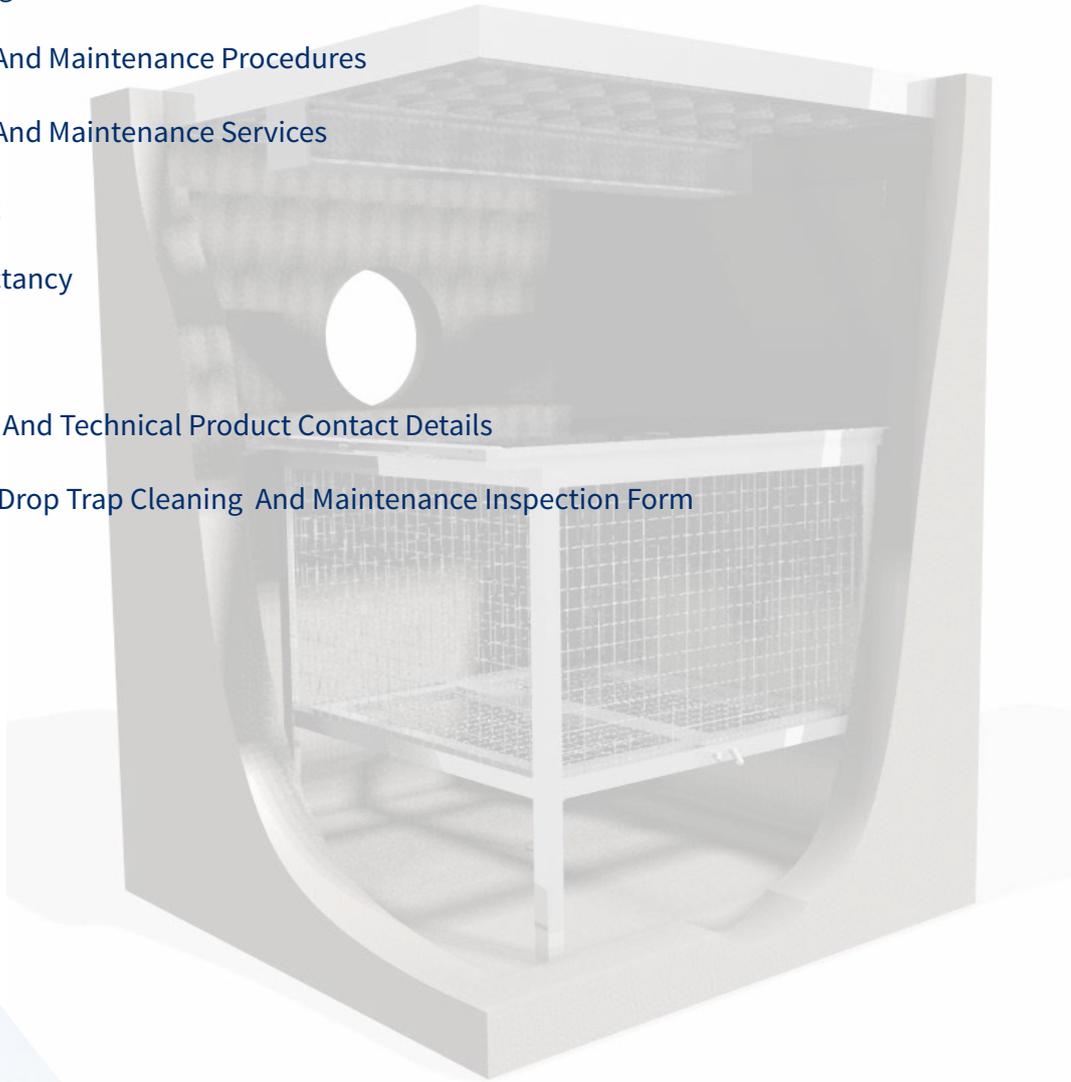


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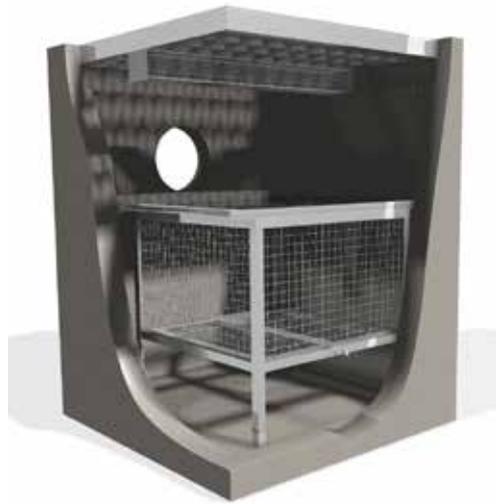


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The Ecosol™ Drop Trap has been designed specifically for easy, safe on-site cleaning and maintenance using a licensed waste contractor equipped with either a crane truck or vacuum truck



## 1.0 Introduction

The Ecosol™ Drop Trap is designed to remove and retain solid pollutants conveyed in stormwater flows on a range of pipelines and consists of a pre-cast concrete pit containing a removable stainless steel capture basket and overflow by-pass flaps. The unit is typically installed either in-line or at the end-of-line, where there is a drop between the upstream pipe invert level and downstream pipe obvert level (normally around a 600mm minimum drop).

## 2.0 Key Dimensions

The Ecosol™ Drop Trap is able to be custom designed to suit most stormwater systems. The below table provides a general guide on typical unit configurations and typical pollutant holding capacities.

Ecosol Product Code	Pipe Diameters		Approximate External Product Dimensions			Pollutant Storage Capacity <sup>3</sup>	Designed Loading	Approximate Heaviest Lift <sup>4</sup>
	(mm)	Length (mm)	Width (mm)	Depth <sup>1</sup> (mm)	Drop <sup>2</sup> (mm)	(m) <sup>3</sup>	Class	Tonnes
Ecosol Drop Trap 1200	300	1500	1500	1,900	450	0.40	B - D	4.4
	375			2,125	600	0.51		4.8
	450			2,350	750	0.66		5.3
	525			2,575	900	0.82		5.7
	600			2,800	1050	0.97		6.2
Ecosol Drop Trap 1500	300	1800	1800	1,900	450	0.70	B - D	5.6
	375			2,125	600	0.86		6.0
	450			2,350	750	1.12		6.6
	525			2,575	900	1.38		7.2
	600			2,800	1050	1.64		7.7

### 3.0 Catchment Size And Recommended Cleaning Frequency

The Ecosol™ Drop Trap should be cleaned regularly. The cleaning frequency and the cost depend heavily on the surrounding environment, the unit's proximity to a waste facility, the number of units, their location, and the type of pollution collected. The figures in the table below give a broad guideline about the optimal catchment size and the number of cleans required annually based on typical expected pollutant loads.

Ecosol Drop Trap Product Code	Maximum Pipe Size	Gross Pollutants Holding Capacity	Optimal Catchment Area (Ha)	Recommended Cleaning Frequency
	mm	m <sup>3</sup>	Ha	Per Annum
Ecosol Drop Trap 1200	600 RCP	0.97	3.40	1
Ecosol Drop Trap 1500	600 OCRP	1.64	5.90	1

<sup>1</sup> Cleaning frequency is based on typical gross pollutant loads anticipated for standard commercial, residential and light industrial catchments. Gross pollutants in this instance includes vegetation as well as anthropogenic litter, however excludes sediment. Cleaning frequencies may vary based on local catchment conditions and rainfall.

### 4.0 Monitoring



Under normal weather and operating conditions, your Ecosol™ Drop Trap requires cleaning approximately every 12 months. However, it is important to monitor regularly the amount of material retained in the capture basket. The inspection form at the back of this document can be used to record the approximate quantity of captured material together with other information about the unit's condition and the need for scheduling cleans and maintenance work.

Initially, Urban Asset Solutions Pty Ltd recommends that monitoring is undertaken monthly. Once the unit has been in operation for an extended period of time (say, 12 months) the monitoring schedule can be adjusted to reflect the actual operating conditions specific to the catchment. It is also recommended that the unit is inspected after every major storm event.

## 5.0 Cleaning And Maintenance Procedures

Prior to cleaning day



It is important that, prior to commencing a clean, you confirm all plant and equipment is available and operational with service records and pre-start checklists available. It is also recommended that weather conditions for the day of the proposed clean be confirmed as the clean can only be completed in dry weather conditions.

Ensure that you:

- Advise all concerned parties of the proposed date and time that the clean is to take place
- Load all equipment
- Obtain approvals from the appropriate authorities
- Complete a safe work method statement for the work to be undertaken

### Site establishment

- Review and amend as necessary and sign off the safe work method statement
- Prior to any work appropriate signage, barriers, and traffic controls, must be in place at the site;

### Cleaning Steps

- (Crane method) - ensuring safe access to the unit, open and secure the access cover and connect the appropriate lifting equipment to the top of the filtration basket
- Slowly lift the internal filtration basket, containing the captured pollutants, from the pit and position over a receptacle
- Remove the pins that hold the hinged doors closed at the bottom of the capture basket, lift the basket, and then let the pollutants fall into the receptacle
- To replace the capture basket, first place it on the ground, closing the doors at the bottom, and securing with the supplied pins
- Ensuring that there are no obstructions in the bottom of the pit, carefully replace the unit
- (Vacuum method) - Position the vacuum truck adjacent to the unit and insert vacuum hose from the vacuum vehicle and remove the pollutants from the capture basket
- Ensure that the by-pass flaps are functioning properly and that there are no obstructions to the flaps
- Secure the pit access cover and remove all the equipment and signage
- Ensure affected areas are restored to their original condition and dispose of all captured pollutants at an approved waste disposal facility



## 6.0 Cleaning And Maintenance Services

Urban Asset Solutions Pty Ltd has a very competitive cleaning service. After each clean we provide a report detailing the volume and type of pollutants removed. We believe that it is in your best interests for Urban Asset Solutions Pty Ltd staff to clean and maintain the unit, not only because we are specialists, but also because proper monitoring and maintenance enhances the unit life significantly.

Should you use another company to clean the unit, or undertake this work yourself, we request that it be conducted according to Urban Asset Solutions Pty Ltd maintenance guidelines. Otherwise, you may invalidate your warranty, as damage caused by inappropriate cleaning procedures is not covered. The advantages of using Urban Asset Solutions Pty Ltd to clean and maintain your unit are that you get:

- regular inspections of your unit
- a comprehensive cleaning service with removal and disposal of all captured pollutants
- a detailed report provided on completion of each clean; and
- trained and experienced staff
- remedial work completed promptly, if required



## 7.0 Reporting

After each clean it is important that all cleaning data is recorded for use in ongoing asset management activities. A cleaning report should be prepared that details as a minimum the following information

- Site location;
- Date and time of the clean
- Duration of the clean
- Volume or weight of material removed
- Composition of the captured material eg. sediment, vegetation and litter
- Details of any remedial work undertaken or required at a later stage

## 8.0 Life Expectancy

The Ecosol™ Drop Trap is covered by a twelve month warranty provided the unit is maintained and cleaned with the frequency, and using the method, recommended in this maintenance guide.

## 9.0 Warranty

The Ecosol™ Drop Trap is designed to meet strict engineering guidelines and manufacturers guarantees. The stainless steel components have a life expectancy of 20 years while the steel reinforced pre-cast concrete pit has a life expectancy of 50 years providing appropriate maintenance practices are employed.

## 10.0 Supplier And Technical Product Contact Details

For any maintenance or technical product enquiries please contact:  
Urban Asset Solutions Pty Ltd  
Tel: 1300 706 624  
Fax: 1300 706 634  
Email: [info@urbanassetsolutions.com.au](mailto:info@urbanassetsolutions.com.au)



# 11.0 Ecosol™ Drop Trap Cleaning And Maintenance Inspection Form

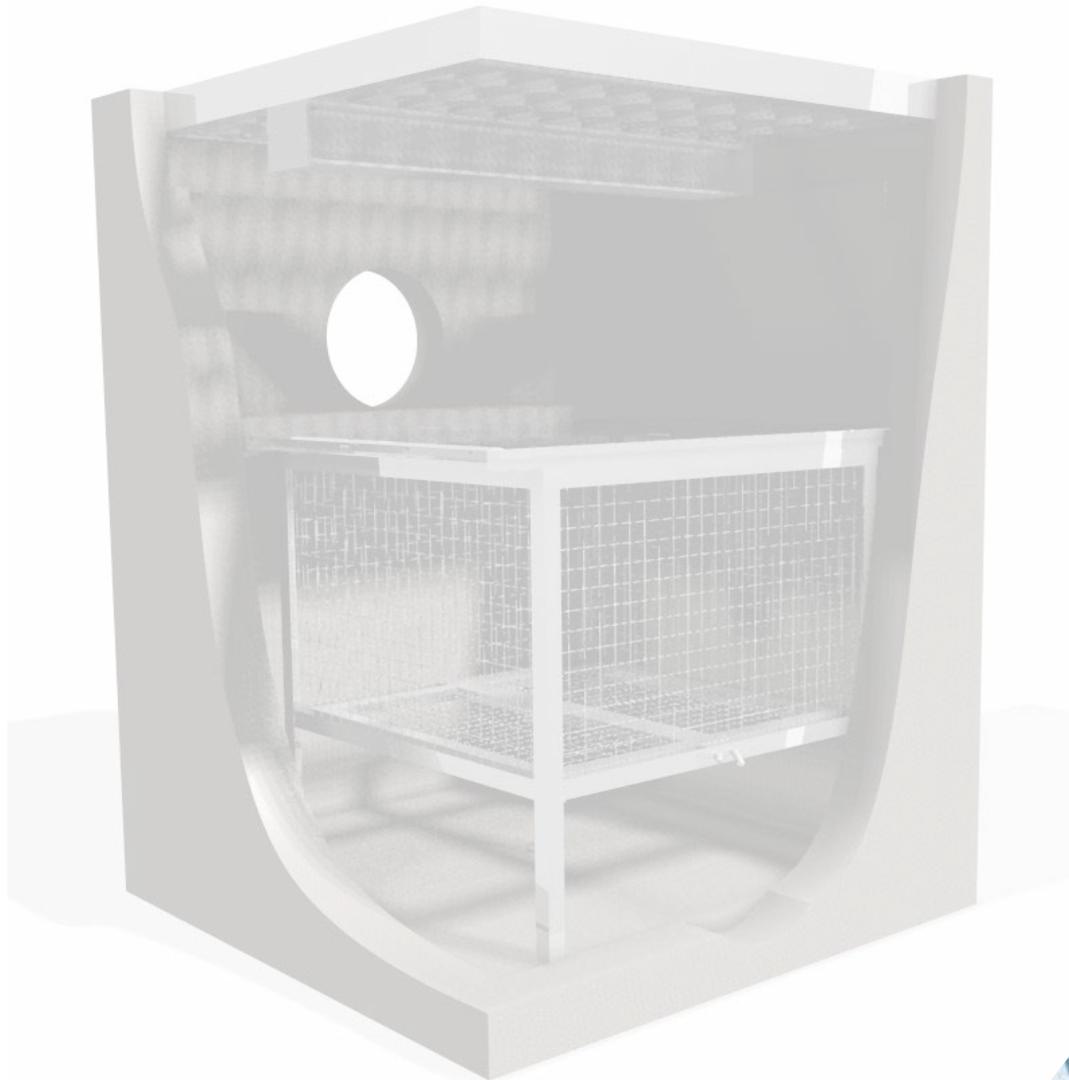
Asset Owner: \_\_\_\_\_ Asset ID: \_\_\_\_\_  
 Unit Location : \_\_\_\_\_ Ecosol Ref: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_ Product Code: Ecosol™ Drop Trap  
 Inspected By: \_\_\_\_\_

## Visual Inspection

Visual Inspection	Good	Fair	Damaged	Remarks
Condition of Drop Trap Filter Basket				
Litter Basket % of fill				
Condition of Sump pit				
Surrounding surfaces (Hardstands)				
Condition of By-pass flaps				
Condition of Trap Doors				
Condition of Access Covers				
Standing Water Level				

## Comments

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