

SciCloneX[™] Separator Operation & Maintenance Manual

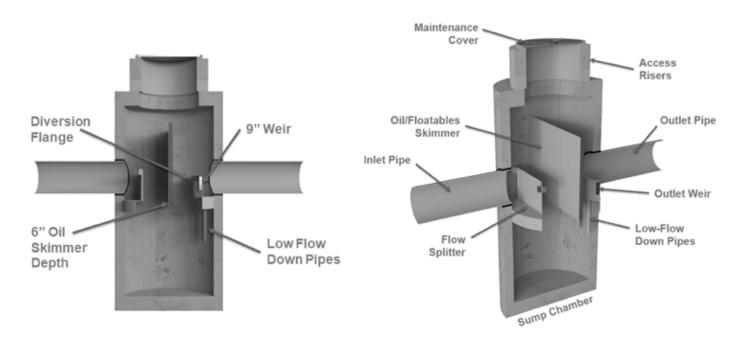


Operation & Maintenance

The SciCloneX[™] Separator is designed to remove high levels of trash, debris, sediments and hydrocarbons. Its efficient design and construction maximize longevity and minimize maintenance requirements. The simple design of the system allows for unimpeded access for quick and easy maintenance. The SciCloneX[™] Separator is able to effectively capture and store sediment with no maintenance or loss of treatment capacity for several years based on annual average loading in most regions.

Yet, as with all stormwater BMPs, inspection and maintenance on the SciCloneX[™] Separator is necessary. Stormwater regulations require that all BMPs be inspected and maintained to ensure they are operating as designed to allow for effective pollutant removal and provide protection to receiving water bodies. It is recommended that inspections be performed multiple times during the first year to assess site-specific loading conditions.

This is recommended because pollutant loading can vary greatly from site to site. Variables such as nearby soil erosion or construction sites, winter sanding of roads, amount of daily traffic and land use can increase pollutant loading on the system. Observations made during the first year of inspections can be used to set inspection and maintenance intervals for subsequent years. Without appropriate maintenance, a BMP can exceed its storage capacity which can negatively affect its continued performance in removing and retaining captured pollutants.



System Diagrams

Inspection Equipment

Following is a list of equipment to allow for simple and effective inspection of the SciCloneX[™] Separator:

- Contech Inspection Form (contained within this manual)
- Flashlight
- Manhole hook or appropriate tools to remove access hatches and covers
- Appropriate traffic control signage and procedures
- Measuring pole and/or tape measure
- Protective clothing and eye protection
- Note: entering a confined space requires appropriate safety and certification. It is generally not required for routine inspections or maintenance of the system.



Inspection Steps

The core to any successful stormwater BMP maintenance program is routine inspections. The inspection steps required on the SciCloneX[™] Separator are quick and easy. As mentioned above, the first year should be seen as the maintenance interval establishment phase. During the first year more frequent inspections should occur in order to gather loading data and maintenance requirements for that specific site. This information can be used to establish a basis for long-term inspection and maintenance interval expectations.

The SciCloneX[™] Separator can be inspected through visual observation without entry into the system. All necessary pre-inspection steps must be carried out before inspection occurs, especially traffic control and other safety measures to protect the inspector and near-by pedestrians from any dangers associated with an open access hatch or manhole. Once these access covers have been safely opened, the inspection process can proceed:

- Prepare the inspection form by writing in the necessary information including project name, location, date & time, unit number and other info (see inspection form).
- Observe the inside of the system through the access hatches. If minimal light is available and vision into the unit is impaired, utilize a flashlight to see inside the system.
- Look for any out of the ordinary obstructions in the inflow pipe, sump chamber, or outflow pipe. Write down any observations on the inspection form.
- Through observation, and/or digital photographs, estimate the amount of floatable debris accumulated on the influent side of the oil/floatables skimmer. Record this information on the inspection form. Next, utilizing a tape measure or measuring stick, estimate the amount of sediment accumulated in the sump. Record this depth on the inspection form.
- Finalize inspection report for analysis by the maintenance manager to determine if maintenance is required.

Maintenance Indicators

Based upon observations made during inspection, maintenance of the system may be required based on the following indicators:

- Missing or damaged internal components
- Obstructions in the system or its inlet or outlet
- Excessive accumulation of floatables in the sump chambers in which the length and width of the chambers behind oil/floatables skimmer is fully impacted extending down more than 9"
- Excessive accumulation of sediment in the sump chamber of more than 18" in depth

Maintenance Equipment

It is recommended that a vacuum truck be utilized to minimize the time required to maintain the SciCloneX[™] Separator:

- Contech Maintenance Form (contained in O&M Manual)
- Flashlight
- Manhole hook or appropriate tools to access hatches and covers
- Appropriate traffic control signage and procedures
- Protective clothing and eye protection
- Vacuum truck (with pressure washer attachment preferred)

Maintenance Procedures

It is recommended that maintenance occurs at least three days after the most recent rain event to allow for drain down of any associated upstream detention systems. Maintaining the system while flows are still entering it will increase the time and complexity required for maintenance. Cleaning of the sump chamber can be performed from finish surface without entry into the vault utilizing a vacuum truck. Once all safety measures have been set up cleaning of the sump chamber can proceed as followed:

- Remove all access hatches (requires traffic control and safety measures to be completed prior).
- Using an extension on a vacuum truck position the hose over the opened access hatch and lower into the center of the sump chamber on the inlet side of the oil/floatables skimmer.
- Remove all floating debris, standing water and sediment from the sump chamber. Access to the bottom of the sump chamber is unimpeded. The vac hose can be moved from side-to-side to fully remove sediments at the corners. A power washer can be used to assist if sediments have become hardened and stuck to the walls or the floor of the chamber. Repeat the same procedure on the effluent side of the oil/floatables skimmer to remove any remaining sediment. This completes the maintenance procedure required on the sump chamber and the SciCloneX[™] Separator.
- Close up and replace all access hatches and remove all traffic control.

Note: Entering a confined space requires appropriate safety and certification. It is generally not required for routine maintenance of the system.

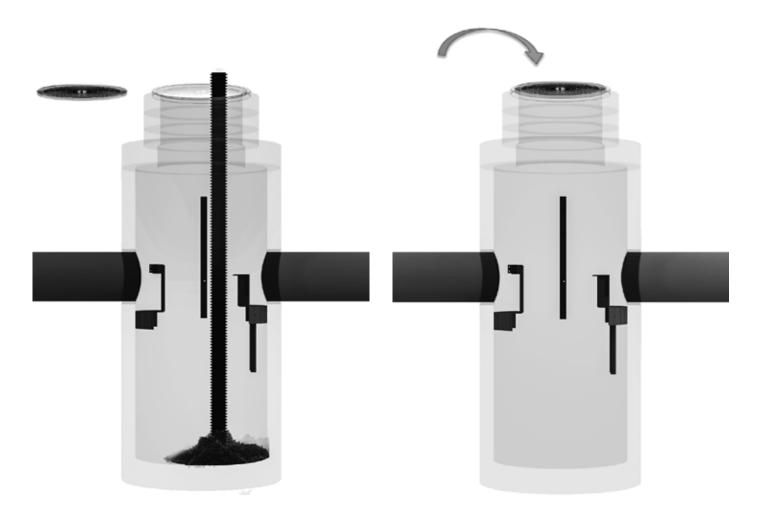
- All removed debris and pollutants shall be disposed of following local and state requirements.
- Disposal requirements for recovered pollutants may vary depending on local guidelines. In most areas the sediment, once dewatered, can be disposed of in a sanitary landfill. It is not anticipated that the sediment would be classified as hazardous waste.
- In the case of damaged components, replacement parts can be ordered by the manufacturer.

Maintenance Sequence



1. Remove Access Hatches Set Up Vacuum Truck to Clean the Sump Chamber.

2. Insert Vacuum Hose On the Inlet Side of the Oil Floatables Skimmer and Vacuum Out All Trash, Sediment and Standing Water.



3. Insert Vacuum Hose On the Outlet Side of the Oil/Floatables Skimmer and Vacuum Out Any Remaining Sediment.

4. Replace Access Hatches and Remove Traffic Control and Safety Equipment.



Inspection and Maintenance Report Bio Clean SciCloneX™ Separator

Project Name						Office Use Only
Project Address						wed By)
Owner / Management Company						
Contact			Phone () –		e personnel to complete section to the left.
Inspector Name			Date	II	Time	AM / PM
Type of Inspection Routine Follow Up Complaint Stor Storm Event in Last 72-hours? No Yes						
Weather Condition Additional Notes						
Site Map #	GPS Coordinates of Vault	Model #	Oils and Floatables Accumilation on Inlet Side of Oil/Floatables Skimmers (lbs)	Sediment Accumulation In Sump Chamber (Ibs) & Depth (inches)	Structural Notes	Operational Per Manufactures' Specifications (If not, why?)
	Lat:					
	Long:					
	Lat:					
	Longi					
	Long:					
	Lat:					
	Long:					
Comments:						





© 2022 CONTECH ENGINEERED SOLUTIONS LLC, A QUIKRETE COMPANY

800-338-1122

WWW.CONTECHES.COM

ALL RIGHTS RESERVED. PRINTED IN THE USA.

CONTECH ENGINEERED SOLUTIONS LLC PROVIDES SITE SOLUTIONS FOR THE CIVIL ENGINEERING INDUSTRY. CONTECH'S PORTFOLIO INCLUDES BRIDGES, DRAINAGE, SANITARY SEWER, STORMWATER AND EARTH STABILIZATION PRODUCTS. FOR INFORMATION ON OTHER CONTECH DIVISION OFFERINGS, VISIT CONTECHES.COM OR CALL 800-338-1122.

SUPPORT

DRAWINGS AND SPECIFICATIONS ARE AVAILABLE AT WWW.CONTECHES.COM

NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS A WARRANTY. APPLICATIONS SUGGESTED HEREIN ARE DESCRIBED ONLY TO HELP READERS MAKE THEIR OWN EVALUATIONS AND DECISIONS, AND ARE NEITHER GUARANTEES NOR WARRANTIES OF SUITABILITY FOR ANY APPLICATION. CONTECH MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, RELATED TO THE APPLICATIONS, MATERIALS, COATINGS, OR PRODUCTS DISCUSSED HEREIN. ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY CONTECH. SEE CONTECH'S CONDITIONS OF SALE (AVAILABLE AT WWW.CONTECHES.COM/COS) FOR MORE INFORMATION.