



NPCA Certified

S&M Precast, Inc.

Serving Indiana & Kentucky

OCEAN GUARDIAN INSPECTION AND MAINTENANCE MANUAL

Plant Location:
16700 Sima Gray Road
Henryville, IN 47126

Phone: (812) 246-6258
Fax: (812) 294-4862
E-mail: sales@smprecast.com

Maintenance Plan

The OG captures floatables and sediment from stormwater runoff during rain events. The unit needs to be cleaned of the collected pollutants so the unit can efficiently remove sediment and floatables for many years to come. Frequency for cleaning depends on installation site. There may be state or local guidelines in place for SQU's maintenance. Certain sites may be more prone to hydrocarbon runoff, trash, or sediment therefore additional sediment storage can be provided. S&M Precast Inc. recommends bimonthly inspection for the first year which will give good insight to the maintenance interval for the following years. The inspections can be reduced after an expected pollutant capture rate is determined. If a hydrocarbon spill has occurred, the OG must be cleaned. Cleaning of the impervious surfaces treated by the unit will decrease the amount of cleanouts needed. A maintenance plan can be found below.

Inspection

The OG can be offered with several types of lids but the most common will be a manhole lid or aluminum hatch. This allows easy access to the internals without the use of special tools. All internal parts are non-moving and does not require filters or bags to be replaced.

Inspection is very simple to accomplish with the easy access lid. After the hatch has been opened or the manhole lid has been removed, there is a clear line of sight to the bottom of the unit. A few tools may be needed for a proper inspection: tape measure, pen, paper, manhole hook, measuring stick, sludge sampler, net for trash, flashlight, etc. All inspections do not require someone to enter the unit but it is important to visually inspect the baffles. Although the unit has more capacity, it is recommended to pump-out the OG once it has reached a 50% sediment depth of the max capacity. Hydrocarbons and floatables should be removed when they reach 9-3/8" (larger units will be deeper) regardless of sediment depth. If a hydrocarbon spill has occurred, immediate cleanout is required. Additional information can be available by request from S&M Precast Inc.

Maintenance Cleanout

Maintenance should take place after an inspection has occurred requiring the unit to be cleaned. Do not clean the unit while stormwater is flowing through the OG. Trash will be skimmed off of the top with a net or other apparatus. A vacuum truck may then dewater the unit till all pollutants have been emptied. A wash down may be required to fully clean and breakaway all debris. Due to the two baffle system of the OG, cleaning is easy with the open design. The unit

does not need to be refilled with water after maintenance has been completed.

Sorbent pads maybe placed in some units depending on site requirements. They should be fished out from the surface not requiring entry into the unit. If entry is required, the OSHA confined space guidelines are required. Reach out to S&M Precast Inc. safety personnel before entry.

All materials that have been removed must be disposed of in accordance with local regulations.

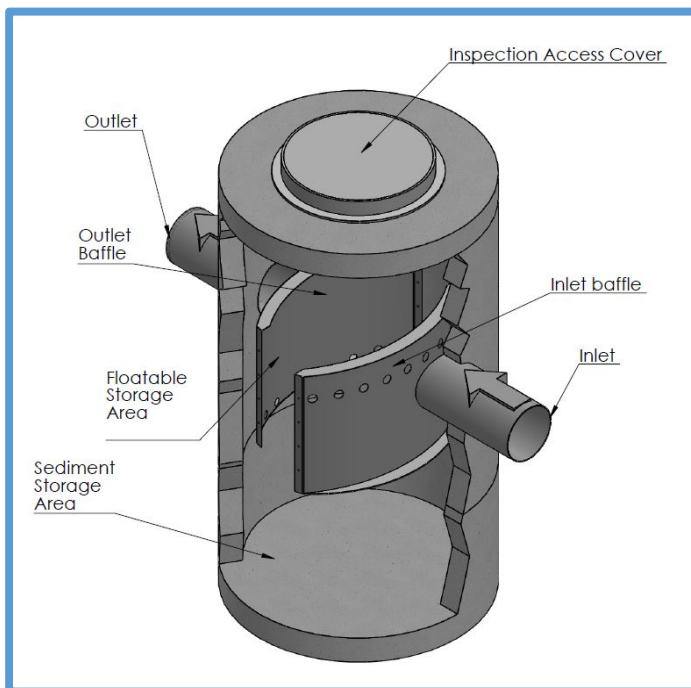


Figure 1: OG Detail View

Table 1: This table shows capacities and heights for standard units, custom units are available with larger storage capabilities.

Ocean Guardian™ Sediment Storage Capacities and Depth					
Model	Diameter (ft)	Sediment Storage Capacity 50% (yd ³)	Depth from water level to 50% sediment (in)	Sediment Storage Capacity 100% (yd ³)	Depth from water level to 100% sediment (in)
OG-48	4	0.427	37.9	0.853	26.9
OG-60	5	0.667	37.9	1.333	26.9
OG-72	6	0.960	37.9	1.920	26.9
OG-84	7	1.307	56.3	2.613	45.3
OG-96	8	1.707	64.3	3.413	53.3
OG-120	10	2.666	80.4	5.333	69.4
OG-144	12	3.840	96.5	7.679	85.5

Table 2: This table shows capacities and heights for standard units, custom units are available with larger storage capabilities.

Ocean Guardian™ Floatables Storage Capacities and Depth			
Model	Diameter (ft)	Hydrocarbon Storage Capacity 100% (gal)	Max Depth for Hydrocarbons (in)
OG-48	4	59	9 3/8
OG-60	5	92	9 3/8
OG-72	6	132	9 3/8
OG-84	7	268	14
OG-96	8	401	16
OG-120	10	783	19 7/8
OG-144	12	1354	23 7/8

Ocean Guardian™ Maintenance Record

Model: _____ **Location:** _____

Date	Depth from water level/invert to sediment (in)	Floatable Level Thickness (in)	Inspection or Cleanout?	Name	Notes

1. This table should be used to track maintenance records for every Ocean Guardian
2. Measure from outlet invert (water level in the unit) to the top of the sediment. This determines when a cleanout is required.
3. If a hydrocarbon spill has occurred, the unit should be cleaned immediately