

EVAC Filtration System

*Complete Evacuation Filtration System for Vaults,
Manholes, Elevator Shafts, Bilges, Tanks and More.*



INSTRUCTION MANUAL

This manual provides basic instructions on how to use the EVAC Filtration System. Your facility's protocol may differ.



Submersible centrifugal pump, hose(s) and connectors.



EVAC Filtration System



Hydrocarbon Detection Strips



Oil Solidifying Polymer Granules in Bucket and Dissolvable Packets

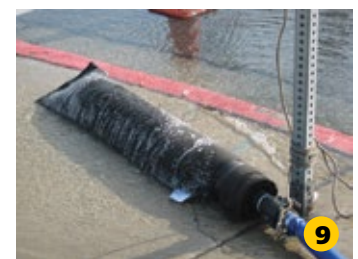
HOW TO USE EVAC FILTRATION SYSTEM WITH LIGHT SEDIMENT AND SHEEN

ASSESS THE VAULT WATER

1. Look at the water for visual clues of oil, sheen and sediment.
2. Collect a sample of the water using a Bailer or use a Hydrocarbon Detection Strip to determine the presence of hydrocarbons. If the strip turns a darker blue than the paper color, hydrocarbons are present.
 - a. If the water is slightly cloudy and light sheen is present, proceed with using the EVAC Filtration System.
 - b. If the water has more than light sheen and is cloudy with sediment or rust, contact an environmental specialist or follow the instructions for use of EVAC Filtration System with more than light hydrocarbons.

CLEAN AREA AND SET-UP EVAC FILTRATION SYSTEM

1. Remove debris in the gutter area down from the vault to the storm drain.
2. Unroll the hose laying it flat next to the curb. Inspect hose for holes and rips where contaminated water could leak. Inspect the pump.
3. Remove the EVAC Filtration System from its (optional) storage bucket. If reusing the EVAC Filtration System, inspect it for rips or tears.
4. Attach the hose on the centrifugal pump. Multiple hoses can be connected together. Use adapters if hose(s) doesn't fit correctly.
5. Connect the EVAC Filter System to the hose and place it as close to the stormwater inlet as possible while keeping it flat. Use adapters if connection is not tight.
6. It is advised to secure the EVAC Filtration System.
7. Lower the pump into the vault until it is 6-8 inches above the sediment.
8. Begin pumping. While pumping do not stand or jump on the EVAC Filtration System.
9. Monitor the process closely for signs of hydrocarbons, a low flow which could indicate the EVAC Filter is filling with sediment, and any leaks from the hoses or EVAC Filtration System. If the Hydrocarbon Detection Strip turns a dark blue, hydrocarbons are getting through the skin of the filter and pumping needs to stop. Collect samples of water flowing from the EVAC Filtration System and use a Hydrocarbon Detection Strip to test the water.



CLEAN-UP

1. Turn off the pump and disconnect the hose from the pump.
2. Roll up the hose toward the EVAC Filtration System to rid the hose of contaminated water.
3. Disconnect the hose from the EVAC Filtration System and place the System back in its bucket.

NOTE: If the EVAC Filtration Bag was still filtering the water clean after use, it can be reused. Place it back into its storage bucket. If used in frigid temperatures, allow it to dry before reuse. If put away wet and it freezes, soak in warm water to allow the Filtration Bag to thaw before use.

If the Filtration Bag becomes full of sediment or reaches its maximum hydrocarbon load, place it back in its storage bucket and follow recycling standards. Replacement Filtration Bags are available. Contact Diverse Environmental Solutions (DES) for information.

HOW TO USE EVAC FILTRATION SYSTEM WITH MORE THAN LIGHT SEDIMENT AND HYDROCARBONS

ASSESS THE VAULT WATER

1. Look at the water for visual clues of oil, sheen and sediment.
2. Collect a sample of the water using a Bailer or other collection device or use a Hydrocarbon Detection Strip to determine the presence of hydrocarbons. If the strip turns a darker blue than the paper color, hydrocarbons are present.

PRE-TREAT WATER WITH DES OIL SOLIDIFYING POLYMER

1. Dispense Oil Solidifying Polymer Granules or Dissolvable Packets into the vault or manhole. One pound of granules will solidify four pounds of hydrocarbons (approximately a half gallon).
2. Place a submersible centrifugal pump into the water. While holding the end of the discharge hose with the Camlock fitting, spray the water surface and the corners of the manhole or vault to agitate the Oil Solidifying Polymer Granules.
3. Continue adding the Oil Solidifying Polymer Granules until the hydrocarbons have been encapsulated.
4. Remove the encapsulated hydrocarbons using a mesh retrieval net or pool skimmer. Solidified hydrocarbons can be disposed of in most landfills.
5. A small residue of Oil Solidifying Polymer Granules can be left in the vault and will be collected in the EVAC Filtration Bag.



CLEAN AREA AND SET UP EVAC FILTRATION SYSTEM

1. Remove debris in the gutter area from the vault to the storm drain.
2. Unroll the hose laying it flat next to the curb. Inspect hose for holes and rips where contaminated water could leak. Inspect the pump.
3. Remove the EVAC Filtration System from its storage bucket. If reusing the EVAC Filtration System, inspect it for rips or tears.
4. Attach the hose on the centrifugal pump. Multiple hoses can be connected together. Use adapters if necessary.
5. Connect the EVAC Filter System to the hose and place it as close to the stormwater inlet as possible while keeping it flat. Use adapters if connection is not tight.
6. It is advised to secure the EVAC Filtration System.
7. Suspend the centrifugal pump 6-12 inches above any sediment and tie off.
8. Begin pumping. While pumping do not stand or jump on the EVAC Filtration System.
9. Once the majority of water has been removed and filtered, gradually lower the centrifugal pump.
10. Monitor the process closely for signs of hydrocarbons, a low flow which could indicate the EVAC Filters filling with sediment, and any leaks from the hoses or EVAC Filtration System. If the Hydrocarbon Detection Strip turns a dark blue, hydrocarbons are getting through the skin of the filter and pumping needs to stop. Collect samples of water flowing from the EVAC Filtration System and use Hydrocarbon Detection Strip to test the water.
11. The EVAC Filtration Bag will start to fill with sediment more quickly causing the flow to slow down.
12. When most of the water has been evacuated, the mud/sediment can be removed by other means, i.e., shovel, trowel and bucket.
13. Consider disposal of mud/sediment carefully as toxicity could be present. Follow agency guidelines.

CLEAN-UP

1. Turn off the pump and disconnect the hose from the pump.
2. Roll up the hose toward the EVAC Filtration System to rid the hose of contaminated water.
3. Disconnect the hose from EVAC Filtration System, place the System back in (optional) bucket.

