



The Elimo Filter

Filter for The ELIMINATOR™

The Elimo-Filter is designed to effortlessly fit into The Eliminator™ Oil & Floating Debris Trap for Catch Basins, thereby combining with The Eliminator™ to turn the Catch Basin into a total treatment system which will meet or exceed EPA Phase II requirements for 80% reduction in total suspended solids. The Eliminator™ Trap and The Elimo-Filter will fit into a 12" outlet pipe from a standard Catch Basin without tools, adhesives, or fasteners of any kind. When installed in the Catch Basin outlet pipe the Trap/Filter combination will remove a minimum of 80% TSS under any flow condition up to and including flow rates of 2 cubic feet per second. In order for the Trap and Filter to do this, the Catch Basin must have a minimum of 36" from the Outlet to the bottom of the Catch Basin Sump and a minimum capacity of 36 cubic feet below the Outlet.

THE BONES

The Elimo-Filter housing cylinder is manufactured using a pressure injection process from recycled post consumer plastics. The cylinder cover is made in a similar way. Both cover and cylinder are designed to optimize flow versus contact time for water flowing through the filter.

THE GUTS

An Open Cell Matrix is used to contain the filter Media in the cylinder and to maintain optimal Media configuration within the filter housing. The standard filter Media is a naturally occurring mineral aggregate specifically sized to allow maximum flow while optimizing total contact time.

THE FILTER MECHANISM

The standard The Elimo-Filter Media can target a wide range of storm water contaminants including hydrocarbons and heavy metals such as cadmium, zinc, chromium, lead, copper and nickel. Standard filter Media is a crystalline aluminosilicate structure whose internal pores serve as surface area for adsorption of hydrocarbon based contaminants while its ion exchange capability removes through a process of chemical ion exchange the heavy metal contaminate component of the storm water waste stream. Internal pore size of the filter media is in the range of 3 to 10 angstroms and each ounce of media provides in excess of 2,100 square yards of surface contact area. As a particulate filter The Elimo-Filter Media performs similarly to a sand filter inhibiting the flow of suspended solids through a screening process of obstruction, attraction, and settlement.

THE SYSTEM

Working in conjunction with a properly sized Catch Basin Sump, and a floating oil absorbing pillow **The Elimo-Filter** and **The Eliminator™** Trap will remove all floating debris, and oil. This combined system will also remove all gross debris both floating and heavier than water. This system will further remove with greater than 80% efficiency TSS loading, under all flow conditions up to and including 2 cubic feet per second. The treatment characteristics of this system will meet the requirements of EPA Phase II criteria.

SERVICABILITY

The Elimo-Filter is designed for a service life of one year under normal conditions. This service life should not be adversely effected by larger than normal storm events unless they produce significantly greater amounts of TSS than were anticipated in the drainage design concept. A twice-yearly inspection of Catch Basins is a recommended and often required practice under a storm water management plan. Adhering to this practice will ensure proper operation of the Catch Basin and **The Elimo-Filter/Eliminator™** Trap combination. Replacement of **The Elimo-Filter** should be done during the annual cleaning of the Catch Basin. Spent filters should be returned to Ground Water Rescue Inc. for recycling. All components of **The Elimo-Filter** are 100% recyclable.

PRACTICAL

Our motto at Ground Water Rescue, Inc. is to treat storm water pollution one drop at a time. As Catch Basins are the primary collection mechanism we believe that the treatment should take place there. There are many advantages to this approach; primarily the volumes are smaller and the kinetic's of the problem are easier to handle. This approach not only is more efficient from a total removal standpoint but it is also more cost effective to implement. No additional major structures have to be added to the drainage system design. The proposed Catch Basins merely have to be modified for no more than a total cost of \$700.00 per basin. Considering that the Catch Basin would be fitted with a device similar to **The Eliminator™** Oil & Floating Debris Trap in any event, the additional cost to add **The Elimo-Filter** would be no more than \$400.00 per basin. This offers significant cost savings in comparison to even the least expensive TSS removal unit on the market.